

THE FIELDS AND METHODS OF SOCIOLOGY

To
THE MEMBERS OF
THE AMERICAN SOCIOLOGICAL SOCIETY

To which Fellowship
all of the contributors to this
volume belong and upon
whom it is dependent
for a successful
reception

The Fields *and* Methods of Sociology

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NAWAB SALAR JUNG BAHADUR,

FARRAR & RINEHART, INC.

New York

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PRINTED IN THE UNITED STATES OF AMERICA
BY THE POLYGRAPHIC COMPANY OF AMERICA, N. Y.

PREFACE

THIS volume is intended to serve as a textbook for advanced courses in sociology in which the purpose is to survey the various divisions of sociology as this science has developed in the United States in particular, and in all other countries where the subject is taught or studied. It emphasizes especially the sources of materials for investigation, the methods of research, and the processes of generalization in the various fields of sociological science. Present day sociologists are more interested in research than in classification. It is recognized, however, that intelligent research cannot be undertaken to the best advantage without an adequate understanding of the various divisions into which the general science of sociology falls. Consequently, the first part of the volume is devoted to an analysis of the fields and problems of sociology and the second part to sources and methods. While the volume is organized in textbook form, it is expected that it will appeal very largely to the general reader who is searching for a well organized and clear presentation of the subject of sociology in all its aspects. It is believed that the present volume offers the most complete and thoroughgoing analysis and synthesis of sociological content and methodology now available.

I wish to emphasize especially the inductive approach of the present treatise. Every chapter is the result of a careful study of the data it treats. Speculative and *a priori* approaches have been avoided. Consequently each field of sociology has been analyzed realistically as to subject matter, sources and methods and the results are set forth as clearly and as simply and directly as possible.

This book is based in the main upon the fifteen scope and method programs¹ which formed the core of the 1932 program of the American Sociological Society, which met in Cincinnati, Ohio, December 28-31, 1932. The Executive Committee of the Society granted to the editor (at that time president of the Society) per-

¹ The authors of Chapter XII, Part I and Chapters V, XI, and XII, Part II were selected by chairmen of autonomous sections of the Society and the authors of the other chapters were selected by the editor in his capacity as president of the Society or as editor.

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mission to select the papers suited for such a volume as is here presented and to edit them as circumstances required. The editorial function has been exercised with considerable vigor and with great care. For various reasons, some of the papers were found unadapted to the unity required by a volume which was destined to serve as a textbook. Some of the chapters were therefore rewritten to bring them in line with the special plan of the book. Where the authors were unable for lack of time or for some other reason to rewrite their chapters, the editor availed himself of a specific permission granted by the Executive Committee of the Society to secure substitute chapters. Moreover, all other chapters were revised by their authors in such manner as was necessary to give the book the requisite unity. The business of editing and harmonizing these chapters has been an exacting task, but it is believed that the desired unity has been achieved, while at the same time each chapter has been prepared by some sociologist possessing outstanding capacity in his particular division of sociology. Thus it is hoped that the unity of presentation which has resulted is superior to that which would have been achieved by a single authorship, because it embodies also a unity of superior skill and knowledge without a diversity of radically opposing views. The editor regrets and apologizes for the fact that the limitations of time and the difficulties of securing substitute chapters of the unity required forced him in one case to undertake the preparation of one of the chapters of Part II, and in another case to assign the preparation of a chapter to a competent person working under his immediate supervision. He would have preferred greatly to limit his contribution strictly to the editorial function—which has been sufficiently arduous—and to the preparation of the two orientation chapters introducing the two parts of the book.

All of the contributors to this volume have given their labors wholly without compensation and have themselves borne all expense connected with the performance of their functions. All royalties from sales will be received by the American Sociological Society. I wish, therefore, in the name of the Society, to express the warm appreciation which is due the authors for their interest in bringing the task to completion. It is hoped that the members of the society will strongly second this expression by making generous use of the volume in classes and in otherwise giving it the circulation

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which it deserves. To the publishers also, I wish to express the appreciation which I know the members of the Society feel for their generous personal interest in this publication enterprise and for the financial support which they have given to it. Finally, I desire to give recognition to the constant editorial aid given me by Jessie Bernard, especially in connection with the verification of hundreds of titles, dates, and other items of reference, and for most of the labor involved in the preparation of the special bibliographies at the end of the volume, as well as for assistance in reading the proofs.

L. L. BERNARD.

*Washington University,
March 29, 1933.*

PREFACE TO THE SECOND EDITION

THE necessity of a resetting and a reprinting of this work offers an opportunity to the editor to acknowledge with gratitude the highly favorable reception given it both by teachers and by individual students of sociology within the short time it has been in print. Even his naturally sanguine expectations regarding the success of the book have been greatly surpassed by the actual results. Apparently the time was ripe for an authoritative and representative analysis of the fields of sociology and for realistic analyses of the methodologies now being employed in the several sociological sciences. Although the book did not appear until the beginning of the second semester of the academic year 1933-1934, it received several immediate adoptions as a text book and was widely used as a reference work. The present printing is being made in response to the wide demands for adoptions as a text in courses in the autumn of 1934 and for the general trade. I wish to use this opportunity to express the satisfaction of the

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editor for the many friendly expressions regarding the book which he has received from his colleagues throughout the membership of the American Sociological Society and to thank these kind correspondents in the name of his collaborators in the production of the work and of the American Sociological Society as a whole.

L. L. BERNARD.

*Washington University,
May 18, 1934.*

SUGGESTIONS TO TEACHERS AND STUDENTS

OWING to limitations of space it has not been possible to present chapters on all of the recognized special sociological sciences that constitute subdivisions of sociology. Neither was this deemed to be necessary. Those divisions most cultivated in this country have been selected for fairly detailed expository treatment. The other less cultivated divisions and their relationships with the other divisions have been discussed in the first chapter of Part I in such a manner as to orient the student with reference to the whole field of sociology considered as a unit. Those who wish to cover the whole of the many subdivisions of sociology will find brief, but carefully selected, bibliographies covering both the content and the methodologies of these divisions at the end of the volume. It is to be regretted that considerations of space have prevented the publication of more extensive bibliographies, but it is believed that those here given will prove to be quite adequate for almost any conceivable general need.

Bibliographical material has been made a prominent feature of the book, since it is believed that the general guidance function of this volume in the study of sociology can best be served by such a policy. In connection with each chapter there is a brief selected bibliography of publications discussing the same themes as those treated in the chapters to which they are appended. These bibliographies are intended for those who wish to read or examine more extensively into the subjects developed in the several chapters. The citations in the footnotes are generally of a different character, their purpose being primarily to cite the specific investigations upon which the analysis of the author of each chapter is based.

It will also be observed that the several chapters in each of the two parts are not strictly uniform in treatment. Each part is introduced by an introductory or orientation chapter. This is followed by several chapters dealing either with the fields and problems or with the sources and methods of selected divisions of sociology. The chapters on sources and methods vary in manner of presentation to a noticeable degree, partly to prevent overlapping of the treatment

of methods used in closely related fields of sociology and partly to emphasize certain problems or procedures of particular importance to special phases of the subject. Thus, for example, the chapter on the Sources and Methods of Urban Sociology is devoted mainly to sources, while the chapter on Sources and Methods of Community Study is concerned chiefly with investigation. Finally, at the end of each part of the book there are a few chapters intended to generalize or place in practical applied perspective the fruits of the discussion developed in the preceding chapters. Thus, at the end of Part I are three chapters discussing the utilization of sociological data in social work and social betterment. At the close of Part II there are three chapters discussing the most important applications of statistical method. The detailed application of the case method is discussed in the chapter on the Sources and Methods of Family Study. It is hoped that this method of varying slightly the procedure of the several chapters will result in a synthetically more unified presentation of the subject as a whole without the disadvantage of tiresome repetition.

THE EDITOR.

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PART I

THE FIELDS AND PROBLEMS OF SOCIOLOGY

CHAPTER I

THE FIELDS OF SOCIOLOGY

Two fairly distinct motivations may be discerned at work in any science. One is the drive to understand the environment. The other is the attempt to integrate some sort of explanatory background of knowledge that will aid in the solution of a class of problems. The latter is the more fundamental motive, and the former may be said to be a more or less derivative phase of the second. To these two motives in science we may, perhaps, add a third, that of explaining the fundamental characteristics of the self or personality, although for most purposes of scientific analysis the explanation of the self is included in the explanation of the environment. Most selves or personalities are a part of the social environment, but in those cases where the adjustment problem to be explained by the use of science is a personal one, the self becomes subjective, and hence at least some apparent justification for including the analysis of personality in a third category of science.

All science has arisen out of some sort of adjustment problem situation, although in the later stages of scientific development the problems have become more theoretical than practical and the adjustment demanded has been more often to a world of ideas than to a world of things. Nevertheless, the basic motive in the development of science always has been and probably always will be that of adjustment—the adjustment of the scientist, or of those whom he serves, to something fundamental, either in the practical material or social world of living, or in the more immaterial world of ideas. It is not possible here to go into the evolution of science in order to show how the motivations specified in the first paragraph of this chapter became differentiated and objectified. Perhaps it will be sufficient to start with the fundamental fact of the two or three types of motivation in science and show how this fact affects the field and problems of science—and especially of sociology—as they present themselves today.

Obviously, however much one may wish to solve an adjustment

problem—whether it be simple and individual or complex and social, even universal—this cannot be done without certain kinds of knowledge, that is, knowledge about the materials or objects which must be controlled as a means to perfecting the adjustment. The types of objects that must always be controlled in making and planning adjustments are persons and things, and, as was pointed out above, both are usually to be arranged under the category of environment. The sciences of the environment were the first to pass out of the realm of myth and philosophy into that of comparatively exact and quantitative knowledge. These environmental sciences—astronomy, mechanics, physics, chemistry, biology, and the several biological sub-sciences—were the first to gain mathematical and objective, impersonal treatment because they deal with concrete phenomena which can be viewed or grasped largely through the senses directly and subjected to physical measurements—to inches, ounces, pints, and rates of motion. To be sure, the problems of abstract measurement have latterly come into these environmental sciences also, just as they were the beginning point in the social sciences, but this was only after the environmental sciences had already gained their status of exact sciences through the method of simpler physical measurements.

These environmental sciences were called into existence as so many aids to the mental and social sciences—theologies and philosophies, if one prefers so to denominate them in their earlier stages of development—in planning for personal and social adjustment. Although the scientist's—or the theologian's and philosopher's—understanding of the self and of society might still be shot through with all sorts of mystical and animistic notions—although he might believe in spirit determinism or metaphysical freewill, or that earthquakes and epidemics are the result of punishment by a supernatural personality living in a crystal sphere surrounding the earth—it was a great advantage for planning purposes when he first discovered that the physical things in one's environment can be weighed and measured, that laws of their behavior can be calculated, and that therefore they can be controlled. These physical things, at least, had no free will; they were not subject to the whims and caprices of spirit control; they would respond to the application of force and stimulus in a way that man could foresee and regulate.

The process of reducing the personality and its behavior to the

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same sort of calculability and control has been slower and more difficult, largely due to its greater complexity and spontaneity, and especially because of the invisibility of the physiological and anatomical mechanisms on the one hand and to the abstractness of verbal behavior (the chief content of modern personalities) on the other hand. The prior development of the environmental sciences has been of great aid in the development toward an exact and objective science of personality and of behavior. More and more the attempt to reduce behavior to physico-chemical and psycho-physical processes has been successful. The development of biology into anatomy, physiology, neurology, and endocrinology has at the same time produced an extension of the objective analysis of the physical personality. The old theological assumption of personal control through spirit direction, which later developed into a theory of spirit possession, and thence into a theory of an individual or personal soul (a permanent indwelling directive spirit), has given way, under the influence of an analysis of neurons, cortexes, and endocrines, to the behavioristic theory of the conditioned response and stimulus-response or behavior patterns. The spiritualists and the theologians and the metaphysicians have not welcomed this growth of a science of personality and they have not hesitated to reveal their intellectual character by their strenuous efforts to sweep back the oncoming tide of behavioristic science with their witch brooms on which they have been accustomed to ride in the clouds of spiritistic phantasy. But in spite of this bit of diverting hobby-horse play a science of personality based on a measurable mechanics of behavior is bound to replace the old magical and mystical spiritism which still survives in the thousand and one cults that delight in calling themselves psychological.

Likewise the social sciences have been greatly aided by the prior development of the physical environmental sciences, and now they are receiving a renewed impetus from the development of measurement devices, quantitative description, and consequent control in the field of behavior or personality integration. The social sciences have almost entirely dropped all connection with spiritistic, supernaturalistic, and other mystical determination theories and have adopted instead the methods of environmental analysis. As a consequence we have long had the concept of the abstract social environment (it began among the Sophists and it has been greatly

advanced by the psychic planes and currents social psychologists) and this environment is now being rapidly surveyed and mapped largely with the aid of the new science of behavior, as well as by contacts with and borrowings from the older environmental sciences. Archæology, ethnology, and ethnography, demography, geography, the various specialized social or human geographies, human ecology, anthropology, and descriptive economics, sociology, political science, and a score of other phases of social science, are largely or mainly environmental in character. The number and the ramifications of these environmental social sciences are increasing constantly.

But the social sciences are more than environmental sciences, or bodies of verified knowledge organized about and out of an analysis of some sector or phase of the environment. The old physical environmental sciences, and even biology in its older classificatory aspects, were concerned wholly with the problem of breaking up phases of the physical environment into its elements and with listing these items and with determining how they change and how they came to be. This latter problem of environmental change was, however, later to arise within the environmental sciences than the former problem of environmental analysis. The older social sciences, such as geography, archæology, demography, ethnology, and the specialized geographies, are limited to much the same motivations. But the newer social sciences, and especially sociology, economics, political science, education, religion (not theology), and their various subdivisions, are guided in their selection and organization of data by a different sort of motivation. Their function or purpose is primarily to discover the conditions under which mankind, or units of mankind, can make successful and satisfying adjustments to the environments, both physical and social, and to integrate this tested knowledge into scientific theories, or sciences, as we call these organized bodies of knowledge, which will serve to guide man in his control of his relationships to environment. Since there are many aspects or phases of the human collective relationship of man to his environment, we split up this vast body of social science knowledge into as many subordinate bodies of organized knowledge or sciences as there are major phases to the adjustment problem. That is why we have economics, political science, sociology, etc. and their various subdivisions or sub-sciences. Each represents a way of looking at the human adjustment problem and a body of knowledge that may

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be used in the control of one phase of the collective adjustment process.

The social sciences—at least the ones we have last named—are therefore dynamic and orienting, and perhaps even purposive, in character. These highly functional social sciences grow or develop in two ways. They have originated around a problem, or a set of problems. They require scientific data as a means to the solution of these problems. Even if a particular science loses the sense of the imminence of the practical adjustment problems which it is equipped to solve—as sometimes it does, especially in its more theoretical phases or stages—it nevertheless continues to collect or to manufacture data which will be useful in such adjustment solving situations. When a science reaches that stage of development or that condition in which it ceases to consider the immediate or ultimate functional utility of its data it is in danger of losing also its functional organization and may probably disintegrate and have its content absorbed by other functionally more vital sciences. For sciences may disintegrate as well as develop and grow around a central purpose or viewpoint or aim. In the earlier stages of a functional social science it grows mainly by accretion or borrowing. This has been noticeable in the case of all social sciences and especially of sociology with its wider functional aims. But all the functional social sciences have made heavy demands upon the environmental sciences, both physical and social, and upon one another. The other method of growth is that by experimentation and generalization. These techniques will be discussed in detail in the second part of this volume.

The borrowing aspect of science, and especially of sociology, may properly detain us somewhat longer, since it is related closely to a question that is still debated to some extent by the sociologists. This is the problem of what is the proper sphere and limits of a science. Are there certain natural or logical limits to each science, and should that science therefore be expected properly and modestly to stay at home and not meddle with the data of other sciences? Sociology in particular has been accused of a marked disposition to nomadism—or to vagabondage, if our critics prefer—and even of imperialistic tendencies. The opposite conception of the sphere of a science is that it may take its data wherever it finds them, and that the sole test of title is the ability to use them. There is no

copyright on facts, although there may be on the form in which they are expressed or recorded. I think the solution of this problem of jurisdiction is to be found in the distinction among types of sciences implied by our discussion above. The environmental sciences and the personality sciences are indeed somewhat circumscribed in their use of data by the very fact that they are built more upon data than upon function. This is particularly true of the environmental sciences. Each environmental science is built around a particular field or set of data and it is not concerned with their use or with functional implications.

The functional sciences, however, are built around problems. Their assemblage of data, if not strictly purposive, is at least relative to their central problems of adjustment. Consequently they are not to be defined in terms of their data but in terms of the use that can be made of those data. Thus the term economics indicates a collection of organized data that may be utilized in determining relative values of exchange articles, in production, in distribution, and in consumption. It has other functional implications also, but these are traditionally central. Political science is, similarly, a term indicating a body of organized data which may be used for guidance in legislation, in administration, and in determining the legal rights involved in controversial cases and in matters of social control and public welfare. The term sociology is understood to indicate an organized body of knowledge that may be used for the understanding, control and reconstruction of social relations in particular or in general. Each of these three major social sciences, and especially some of their subdivisions, have their environmental aspects also, by which they tend to be defined in terms of their data rather than by their problems. But in the main each of these social sciences is defined and integrated on the basis of function rather than of content. Consequently, it matters little to either of these sciences where or how it gets its data, so long as they are tested and dependable. They borrow constantly from each other and they borrow also from the environmental and personality sciences, especially from psychology and biology, but even from geology, paleontology, chemistry, physics, mechanics, and astronomy. Moreover, their limits or boundaries do not remain fixed, but vary almost continuously.

The history of these social sciences in the last fifty years shows a remarkable amount of shifting both of area and of problems. Illus-

trations of this fact may be found in the paragraphs that follow. Suffice it to say here that the boundaries or limits of the social sciences—of any science, in fact—were not determined as an act of special creation at the founding of the universe; neither is there any record of their having been set later by revelation. Nor does any principle of metaphysical and unalterable logic, such as the so-called principles of Natural Law, serve to fix and delimit the spheres of the sciences. They are fixed by man himself, and his method of laying out their limits and of modifying their spheres is solely that of setting his problems. Even the setting of his great adjustment problems is in large measure an unconscious process with man—or, at least, it has been hitherto—and the delimiting of his sciences is even less conscious and still more incidental and accidental.

Much the same may be said of the limits and relations of the environmental sciences. While the physical environmental sciences especially are much more stable as to content and boundaries, they owe this stability largely to the inertia of man, who, having once selected and fixed in his attention or defined a phase or sector of the physical environment has been slow to change it. This relative stability of the physical environmental sciences is not, therefore, so much in the nature of things as in the standardized culture of man. But even here boundaries and contents change by a slow, sometimes by a more rapid, process of evolution. Thus, it is now frequently difficult to distinguish physics and chemistry, and a new science of physical-chemistry has arisen on the border lines of the two older sciences. Within each of these have arisen half a score or more of well recognized and more or less subsidiary sciences. In the social environmental sciences similar changes and movements are even more clearly discernible and more rapid.

This process of differentiation has gone on in sociology with great rapidity since its integration as a social science. Sociology is a remarkable instance of the appearance of a functional social science around a set of social adjustment problems. The great and increasing complexity of the problems of social adjustment that have resulted from the industrial revolution with its factory, transportation and credit systems, its complex and multiplied machines, means of communication, and its infinitude of social organizations, has made absolutely necessary some new and more realistic way of looking at this complex of social and individual adjustment prob-

lems. The older disciplines were too incomplete or too partial and biassed, or their viewpoints were not sufficiently modern and realistic. As a result, therefore, of a new and widespread integration and interdependence of social life there arose synthetically a new and highly integrated or inclusive social science. Its problem was more apparent and insistent than its data. As a consequence, it borrowed data from every possible source and was the most active of the social sciences in its attempt to create and organize new data, at first from primitive cultural sources, and then from current statistical and other forms of contemporary observation. Furthermore, the new science of sociology, brought whole sciences and disciplines under its wing from the past. It absorbed its chief rival for the role of general interpreter of the whole social situation—Social Science—which had made something of a stir in the second and third quarters of the nineteenth century. It also absorbed as much of the old moral science or science of ethics, of the philosophy of history, anthropogeography, political ethics, and ethnology as it could use. In fact, it took over so much of ethnology that sociology was very largely cultural or ethnological in the last third of the nineteenth century. In certain quarters it also assimilated considerable portions of Christian Socialism, social reform theory, charities and dependency, criminology and penology, immigration problems, labor problems, and collective psychology. These assimilations took place because, on the one hand, the new science of sociology needed their data, and on the other hand, because they required the wider and more inclusive viewpoint of sociology as a basis for working out their theories of adjustment. Their mutual dependence produced a union, more or less complete and inclusive, under the banner of the new science of sociology.

This process of synthesis within the field of sociology was practically complete by 1890, or shortly thereafter, and the subject of sociology began to be admitted fairly rapidly to college and university curricula. At the same time the older disciplines which had been absorbed by sociology had been for the most part dropped from the curricula. Social Science and ethics were practically the only ones still to persist, the latter especially in the divinity schools as social or Christian Ethics. In time Social Science either disappeared or remained only in departmental titles, as a nominal reminder of an unrealized academic promise. At the same time, that is, from

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1890 on, sociology began a centrifugal movement. It began to proliferate new subdivisions or sub-fields to cover new types of social adjustment problems that were rising into social consciousness. In some cases the old disciplines that had been assimilated to sociology preserved a semi-independence and retained their names within the new fold. This was particularly the case with charities and dependency, criminology, immigration problems, labor problems, anthropology, and collective psychology. In the course of time anthropology sought its independence as a separate department of study. This it was able to achieve because of the large body of environmental data it had at hand for purposes of investigation. Thus it became practically an environmental social science. Ethnology, however, was divided between anthropology and sociology. In the latter affiliation it remained as the problem of races and was redistributed to social psychology and biological sociology or social biology, on the one hand, and was organized into the new branch of sociology known as cultural sociology on the other hand. In the course of time also charities and dependency was either transformed into social pathology or was transferred to a new department of social work arising in the universities. Thus the theoretical phase of this subject remained with sociology under a new name and the applied aspect migrated and joined a new community of interests. Labor problems gradually worked over into economics as that subject expanded its viewpoint and adopted a more socialized outlook. Social or collective psychology split its subject matter, the more definitely individual psychological aspects ordinarily migrating to departments of psychology, while the collective aspects usually remained with sociology. Most of the absorbed content of anthropogeography also went over into departments of geography. These migrations of subjects as a whole or in part from sociology into other departments could scarcely be regarded as spontaneous. In most cases the movement away from sociology was stimulated by administrative decrees or by departmental politics, but it was greatly facilitated by the broadened and socialized outlook of the other social sciences due to their contacts with sociology and also to the more socialized character of the times.

Several new divisions of sociology have arisen since 1890, most of them being of course largely derived from older divisions, and in some cases being little more than a change in names. But on

the whole the number of subdivisions of sociology has increased perhaps more than three-fold within the last thirty or forty years. The following list of these subdivisions, grouped as far as possible with reference to their relations to one another, will help to indicate this rapid expansion of the sociological sciences in keeping with the development and expansion of our social and intellectual problems.

Historical Sociology	Sociology of Law
Biological Sociology	Study of the Family
Demography	Political Sociology
Social Geography	Social Ethics
Human Ecology	Sociology of Institutions
Study of the Community	Social Organization
Rural Sociology	Social Control
Urban Sociology	Sociology of Economic Relations
Folk Sociology	Social Pathology
Cultural Sociology	Criminology and Delinquency
Sociology of Art	Penology
Social Psychology	Social Work
Social Psychiatry	Social Investigation
Educational Sociology	Social Statistics
Sociology of Religion	

It will be seen readily that many of these sociological divisions or sciences overlap with one another, and that some of them do not belong wholly within the field of sociology in general. Biological sociology overlaps with demography, social psychology, social psychiatry, social pathology and criminology in particular. Demography overlaps with social geography, human ecology, the study of the community, rural and urban sociology, folk sociology, political sociology and social work. Cultural sociology has much in common with folk sociology, the sociology of art, social psychology, educational sociology, the sociology of religion, the sociology of law, and the sociology of institutions. The study of the family is closely connected with political sociology, historical sociology, social ethics, the sociology of law, the sociology of social institutions, social organization and social control. Social psychiatry, social pathology, criminology, penology and social work are all closely bound up with one another. Penology and social work are very closely allied in theory, if not in practice. Social statistics may properly be regarded

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logically as a subdivision of social investigation, but as a matter of fact the former is actually treated administratively as a separate subject and receives more attention than the latter in the university curricula.

The reader will easily detect several other overlappings and logical or factual relationships not mentioned here. He will also observe that both social investigation and social statistics do not lie wholly within the field of sociology, but that they are as much integral parts of economics, political science, and some other social sciences as they are of sociology. Further examination of this list of sociological sciences reveals the fact that several more of them are shared by sociology with other social sciences. Thus demography is quite as important to the other social sciences as to sociology, and this is also true of social organization, social control, and perhaps of social psychology. A very important branch of political science is now political psychology, which is clearly a phase of social psychology. The same may be said of the relation of social psychology to economics and religion through business psychology and the psychology of religion. The very titles of several of these sociological sciences serve to show that they either have their correlated developments in the other major social sciences, or that they are borrowed and made over from some other social science. These observations apply especially to historical sociology, biological sociology, social geography, folk and cultural sociology, social psychology, social psychiatry, the sociology of religion, political sociology, social ethics, and the sociology of economic relations. It may truthfully be said that there is not one of the major divisions of sociology as here listed that does not in some degree overlap with some other major social science as well as with some other division of sociology. This in itself is strong evidence of the adventitious and predominantly functional character of the fields and limits of the social sciences. The reader may also be inclined to question the propriety of including penology and social work under the heading of sociology, since the latter at least is sometimes organized as a separate department and both are applied sciences and even social arts. Yet, for the most part, they are still included in the departments of sociology in university curricula. While the administrative practice of universities and colleges cannot be considered as wholly determinative of the fields and limits of the sciences, it is probably a better criterion than

one based on abstract and aprioristic logic. For, after all, a realistic logic and science must perforce hold that logic depends on facts rather than that facts are the creation of logic.

Many sociologists, especially those of aprioristic logical tendencies, would not admit that all of the disciplines here listed as subdivisions of sociology are entitled to that distinction. They would hold that in order to enjoy ranking as subdivisions they should have equal generality of subject matter, that they should be characterized by their subject matter rather than by the method of dealing with the subject matter, and that they should be theoretical rather than applied sciences or arts. On the ground of unequal generality of subject matter the study of the community and rural and urban sociology and the study of the family would be eliminated. Because they are methods of investigation rather than subject matter sciences, both social investigation and social statistics would not be regarded as divisions of sociology under this ruling. Likewise, penology, social work, educational sociology, and social psychiatry would be ruled out by others on the ground that they are social arts, although it might as well be contended that they are applied social sciences. Others still would eliminate the sociology of religion, social ethics and perhaps the sociology of economic relations, social pathology, criminology, and the study of the family on the ground that it is difficult or impossible to make these disciplines into pure sciences and divorce them wholly from melioristic and social welfare tendencies. A fifth group would object to others of these disciplines being recognized as major divisions of sociology or as bona fide sociological sciences on the ground that they cannot be shown to have separate and distinct fields and well defined boundaries. As we have shown above, this criterion, if rigorously applied, would eliminate all of these subdivisions and even the major social sciences themselves from the category of separate and distinct sciences.

In fact, I do not regard any of these objections to the list here presented as valid. All of them are quite obviously academic, aprioristic and unrealistic. It is as necessary to take a pragmatic attitude toward science as toward any other aspect of behavior or life. As we have already seen, the functional social sciences—of which sociology is one—must be defined and allocated in terms of the functional organization of their data about the practical or intellectual problems they are calculated to solve and for whose solu-

tion they constitute bodies of data held in reserve. This principle applies as well to the various subdivisions of sociology here presented as to the field of sociology as a whole. It can be of no consequence whether the data are collected with reference to society as a whole (as in cultural sociology) or with reference to a particular type of community or area (as in rural sociology). Very few of the data of sociology are of universal application anyway. Nor does it matter if melioristic and applied elements or factors enter into the situation. What could be more nonsensical than that someone or some group should decide not to try to study politics scientifically because there is so much prejudice involved in the field of politics? If we applied such a rule universally to the selection of fields of scientific study, the result would be that all our science would soon deal with things of no importance to us and those very fields of behavior most needing the help of science would receive least aid from it. The sociologist must find some other method of keeping his pure soul uncontaminated than that of running away from important problems or fields of investigation. Otherwise we would better embalm him in alcohol and preserve him in a glass jar like some of the other museum specimens with which the public is only too likely to associate him anyway. The other social sciences do not display this phobia for practical and applied problems. The actual fear of the sociologist is probably for his position rather than the intellectual purity of his mind.

Any reader who has had the courage to venture this far and who continues into the succeeding chapters will observe that not all of the subdivisions of sociology here listed are treated in this volume. There are several reasons for the omissions and these may be briefly stated here. Some of the divisions, such as political sociology, the sociology of art, and the sociology of economic relations either are not much developed in this country or they are more commonly grouped elsewhere than with sociology. Sometimes they are made subsidiary to other divisions here listed. Political sociology is relatively well developed in Europe, and especially in Italy, Russia, Spain and England. Treatises bearing this title have appeared in Italy and Spain and several of the works of Graham Wallas, Ramsay MacDonald, the Webbs, Hyndman, Muir, Marvin, Zimmern, Frederic Harrison, John Stuart Mill, Herbert Spencer and others in England, and many of the communists in Eastern and Central

Europe and of political writers in Latin America, would properly come under this term. In this country there is no dearth of writing and investigation in the field of political sociology, although even its cultivators among sociologists—such as S. A. Rice, Seba Eldridge, E. A. Ross, and Bentley—rarely or never characterize it by that name. In our universities it finds its place habitually with political science. In a similar way, the sociology of economic relations, although highly developed by writers like John A. Hobson, the Webbs, G. A. Tawney, Scott Nearing, Jerome Davis, and the large group of students of standards and planes of living, has never appeared officially as a separate field of sociology. It is now assimilated in this country largely either to economics or to social work. The sociology of art is much better known in Europe than in the United States, where it remains a minor division of cultural sociology. Social ethics, social pathology, penology, social geography, the sociology of law, the sociology of institutions, social organization and social control are not given major attention because they have never received primary recognition by the American Sociological Society, although they have not been banned by that body. Some surprise may be felt because there appears to be such a marked concentration in this volume upon those fields of sociology centering about community and regional analysis. This again is due to the actual practice of the American Sociological Society which gives official recognition, in one form or another, to all of the subjects receiving separate treatment in this volume. It seemed best to use the limited space available in such a way as to represent present emphases in sociology in the United States. Accordingly, while the display presented in the following chapters may not be the most logical conceivable, it is nevertheless representative of present trends.

BIBLIOGRAPHY

- Abel, Theodore, "Sociology: Its Nature and Scope," *Social Forces*, XI:176-82 (Dec., 1932).
 Allport, F. H., "The Group Fallacy in Relation to Social Science," *Jl. Abnormal Psych. and Social Psych.*, XIX:60-73 (Apr.-June, 1924).
 Bain, Read, "The Concept of Complexity in Sociology," *Social Forces*, VIII:223-31 (Dec., 1929); 369-78 (March, 1930).

THE FIELDS OF SOCIOLOGY

- Bernard, L. L., "Some Historical and Recent Trends of Sociology in the United States," *S. W. Pol. and Social Sci. Quart.*, IX:264-93 (Dec., 1928).
- "The Limits of the Social Sciences and Their Determinants," *Jl. Philos.*, XXVI:430-38 (Aug. 1, 1929).
- "The Social Sciences as Disciplines: United States," *Encyc. Social Sciences*, I:324-49.
- "Schools of Sociology," *S. W. Pol. and Social Sci. Quart.*, XI:117-134 (Sept., 1930).
- "An Interpretation of Sociology in the United States," *Pub. Amer. Sociol. Society*, XXV:43-54 (1931).
- An Introduction to Social Psychology*, 1926, Ch. I.
- Gillette, J. M., "Boundary Lines of Social Phenomena," *Amer. Jl. Sociol.*, XXX:585-93 (Mar., 1925).
- Lundberg, Anderson, and Bain (editors), *Trends in American Sociology*, 1929.
- McCobb, Helen Irene, "A Definition of Sociology Derived from Titles of Courses," *Social Forces*, X:355-57 (Mar., 1932).
- Ogburn, W. F. and Goldenweiser, A. A. (editors), *The Social Sciences and Their Interrelations*, 1927.
- Park, R. E. and Burgess, E. W., *Introduction to the Science of Sociology*, 1921, Ch. I.
- Rice, Stuart A., "What Is Sociology?" *Social Forces*, X:319-26 (Mar., 1931).
- Sorokin, P. A., "Sociology as a Science," *Social Forces*, X:21-27 (Oct., 1931).
- Woodard, James W., "Critical Notes on the Nature of Sociology as a Science," *Social Forces*, XI:28-43 (Oct., 1932).
- See also leading textbooks in General Sociology.

CHAPTER II

HISTORICAL SOCIOLOGY

A GREAT many American sociologists mention "historical sociology" and the "history of sociology" in the same breath—indeed, some of them apparently make no distinction between the two. This is indeed a lamentable error, now assimilated it does no great harm, for any candid examination of social work. The of social thought will show, there is a real confusion in the United these two widely separated aspects of the field, *i.e.*, cultural sociology. of social evolution and the evolution of social theory, the sociology has well said, they are inextricably interrelated, organization and so which they are both imbedded is the ongoing process which they have never itself.¹ Moreover, there can be no doubt that the American Sociological Society, is an exhibit of the historical relativity of the movement. Some surprising generalizations, and among these the formulæ devised to place concentration of social change occupy a conspicuous place.

If we were to analyze at length the relation of historical sociology and the history of sociology, we should therefore be conducting a critical study of "the sociological relativity of sociological knowledge," the focal point of epistemological sociology as set forth by Scheler and others.² Unfortunately, the space available will not permit us to grapple with so difficult a problem; we must deal with one which is somewhat simpler (although in all conscience complex enough). In other words, we shall restrict our discussion to the field of historical sociology as such, leaving out of account the interrelations referred to, and by the same token, omitting all reference to the history of sociology *per se*.

In addition to the usage just noted, the term "historical sociology"

¹ House, F. N., *The Range of Social Theory*, 1929, p. 545.

² The literature on *Wissenssoziologie*, although of comparatively recent date, is quite voluminous. Only a few representative titles can be listed: Scheler, Max, ed., *Versuche zu einer Soziologie des Wissens*, Munich and Leipzig, 1924; *Die Wissensformen und die Gesellschaft*, Leipzig, 1926; Karl Mannheim, *Ideologie und Utopie*, Bonn, 1929; Wilhelm Jerusalem, *An Introduction to Philosophy*, rev. ed., 1932, pp. 406-431; Karl Dunkmann, ed., *Lehrbuch der Soziologie und Sozialphilosophie* Berlin, 1931, pp. 265-84.

has been applied, rightly or wrongly, in many other ways, some of which we may now list: (1) to the use of historical as contrasted with ethnographical material in sociological theorizing, regardless of whether such theorizing aims at generalizations of co-existence or of succession; (2) to attempts to determine the trend of the total process of sociation, or of the development of culture, or of "the historical movement" as a whole; (3) to the closely related field of the determination of stages in social, cultural, or historical evolution; (4) to the study of social "origins," of the "rise" of the family, the state, and what not; (5) to the related problems of independent process-series, sequence-patterns, cycles, and periodicities; and (6) to efforts to fix the order of the processes. These six types of usage of the term will be found in the order given.

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I.

Park, R. E. and distinguished exceptions, most American sociologists have used data for the study of social life either from the ethnographical and ethnological lore or from the capacities repository afforded by contemporary American culture.⁸ We should not, however, lay all the blame for the failure to use historical data in arriving at sociological generalizations upon limitations peculiar to American social scientists alone. Certainly the example of Spencer, to name only one European sociologist of the late nineteenth century, operated powerfully toward the ethnographization of sociology. With all its tremendous sweep, his *Principles of Sociology* is a telling example of the terrific handicap imposed by concentration upon preliterate data to the virtual exclusion of historical sources.

Curiously enough, many of the American sociologists who have led the way in rejecting Spencer's arid *a priori* schematism continue to purvey a type of ethnographized sociology that duplicates his

⁸ There are good reasons for these predilections in the background of American sociology, and particularly in the American setting itself, but we cannot deal with them in detail here. Let us simply say categorically that most Americans, even in academic circles, are historically provincial in the full meaning of the word. History is a tangled skein of kings and dates, or a ragbag full of curious, brightly-colored scraps, or a sampler stitched with symbols of morals and progress, but rarely is it a closely-woven tapestry with which the very walls of our minds are hung.

crippling neglect of historical data. This ludicrous state of affairs cannot long prevail, however, inasmuch as these very sociologists have shown that there is no longer any reason for focussing on pre-literate material to the degree now evident. The dogma of rigid sequence in social evolution has been shattered, for the preliterate does not necessarily represent the primitive! Instead of studying the Arunta or the Yurok, the "cultural sociologist" who really wants to determine causal sequences in contemporary culture had far better study the direct and indirect historical antecedents and the present state of that culture itself. Further, some members of the school of ethnology (or rather ethnography) now dominant in the United States are busily engaged in proclaiming that no generalizations transcending the limits of particular cultures are possible anyway; if their sociological followers were to take them at their word said sociologists would resignedly resolve to cultivate their own gardens.

And, to carry the fight closer home: Even if the complete transferability of ethnological generalizations were granted by both ethnologists and sociologists, these generalizations would necessarily be inferior to those arrived at through the use of *first-class* historical data.⁴ Reasons: (1) there are not more than a baker's dozen of really good ethnographies—works by Thurnwald, Nordenskiöld, Boas, Rivers, Radcliffe-Brown, Kroeber, Lowie, Wissler, Malinowski, and a few others exhaust the list deemed acceptable by American ethnographers themselves; (2) most if not all of these are nearly valueless for a genuinely critical sociology dealing with time-sequences, for they cover much too short a period; (3) even the best ethnographies suffer from the fact that in the majority of cases the "document" and the "interpretation" necessarily derive from or through the same person—there is no complete set of sources stemming solely from relatively naïve participants, and hence description

⁴ By "historical data" are meant all the kinds of information available concerning the peoples with reasonably full and connected records covering a time-span of more than three or four generations. Contributions may therefore be drawn from history proper and all its auxiliary disciplines, as well as the study of folklore and other branches of knowledge that treat of the non-literate contingents (peasants and the like) of such peoples. This limitation of "history" gives the term a meaning quite different from that assigned it, for example, in Ogburn's paper on "The Historical Method in the Analysis of Social Phenomena," *Pub. Amer. Sociol. Society*, XVI:70-83, 1921. The definition used in the present paper can be made concrete by comparing Allison, et al., *A Guide to Historical Literature* (1931) with the *General Index of The American Anthropologist* (1930).

and analysis tend to coincide; (4) many preliterate represent the *curiosæ* of human races and cultures rather than the norms; (5) there are few preliterate groups unaltered by Western culture, and within a generation these will probably be vastly changed, so that few or no real comparisons can be made; and (6) preliterate language obstacles make it virtually impossible for any considerable number of ethnographers to check the work done by any one investigator, so that when some later field worker casts doubt on the accuracy of Radin's studies of the Winnebago or Mead's work in Samoa, it is almost a case of bare word against bare word.

Certain it is that historical data are blemished in many ways, but the careful student who delves equally deep in both fields will almost certainly come to the conclusion that the scanty shards ethnography yields are usually inferior to the marred or broken, but recognizable and richly figured vases turned up in history's soil. *This is not to deny that the sociologist should make the greatest use possible of the attested data of ethnography*—that were unquestionably to overshoot the mark—but it most emphatically is to say that he who neglects the treasure-trove of history will find himself poor indeed.⁵

II.

Let us now turn to the second listed usage of the term "historical sociology": it often denotes attempts to determine the trend of the total process of sociation, or of the development of culture, or of "the historical movement" as a whole. In other words, it is a label for a certain type of philosophy of history—a type that Barth probably had in mind, however vaguely, when he chose the title of his chief book, *The Philosophy of History as Sociology*.⁶ Mark, "for a certain type of philosophy of history," not for any and every variety. Before we can discuss this certain type, however, a type of which Max Weber will be chosen as the outstanding representative, it is necessary to run over the list of those kinds that cannot justifiably be designated as historical sociology.

Exceedingly prominent in the ranks of the philosophies of his-

⁵ T. D. Eliot has perhaps stated the case for historical data as circumspectly as anyone else: "The Use of History for Research in Theoretical Sociology," *Amer. J. Sociol.*, XXVI:628-36 (March, 1922).

⁶ Barth, Paul, *Die Philosophie der Geschichte als Soziologie*, 4th ed., Leipzig 1922.

tory to be excluded from the field of historical sociology are several of the universal and transcendent sort. By universal is meant purpose or meaning or value toward which not only all of mankind but the entire universe strives, that "one far-off divine event toward which the whole creation moves." The occurrence of the word "divine" in the foregoing quotation hints at what is meant by "transcendent"—the universal meaning or purpose or value is not the more or less fortuitous outcome of a cosmic process itself essentially meaningless, but is to be attributed to God's will, or to the progressive unfolding of the Absolute Idea, or to a beneficent Nature. The lineage of this type of philosophy of history is a long one: it begins with the earliest cosmogonies and cosmologies, takes in Plato and Polybius, Isaiah and John, Chrysostom and Orosius, Augustine and Thomas Aquinas, Bossuet and Paley, Vico and Turgot, Drummond and Wallace, Lilienfeld and Schäffle, and finally, reckons among its recent progenitors Branford, Ellwood, and the early Scheler, to name only a few. In the space at our disposal it is useless to attempt to justify the exclusion of universal and transcendent varieties of the philosophy of history from the field now being delimited; suffice it to say that they are excluded.

In the same way we must bar the universal and immanent (*i.e.*, non-transcendent) species. Even though transcendent sanction is not sought, the assertion of a goal or purpose toward which the development of the cosmos and of human society not only *does* tend but *ought* so to tend places this type outside our field because one of the basic assumptions not only of historical sociology but of all scientific sociology is that *ultimate* value-judgments, such as the word "ought" necessarily implies, cannot be passed upon by any *scientific* means whatsoever. And here again a long, diverse, and impressive lineage confronts us: Condorcet, Burke, Comte, Spencer, Ward, Giddings, Müller-Lyer, Hobhouse, Marx, Burckhardt, Breyzig, Wells, Oppenheimer, Hart—and how many more!

Third in the row of excluded varieties is the relative but transcendent philosophy of history of which the writings of Troeltsch afford the clearest example,⁷ but of which traces are also to be found in Goethe, the German Romanticists, Nietzsche, Dilthey, Alfred

⁷ Ernst Troeltsch, *Der Historismus und seine Probleme*, Tübingen, 1922; Eugene Lyman, "Ernst Troeltsch's Philosophy of History," *Philosophical Rev.*, XLI:443-65 (Sept., 1932).

Weber, Lessing, Klages, and even Spengler. To confine ourselves to the writer first mentioned: Troeltsch approximates the position of many extreme historicists (numbering among their ranks many American ethnographers) in maintaining that there can be no philosophy of history applicable to all mankind because there is no such thing as mankind. Great cultural totalities there are, to be sure, but each has its own peculiar set of values and, *by the same token*, its own peculiar set of causal sequences. Not only is there no way of determining what *ought* to be the universal or even the common-human trend of development, but there is no way of determining what *is* that trend. At the most one can discover the meaningful and the causal sequences in particular cultures to which one whole-heartedly adheres (or to which one can cultivate full allegiance by long participation, mediated through the written record or otherwise). This seemingly complete relativity of values Troeltsch saves for a sort of transcendental sanction by invoking the aphorism of Ranke, *Jede Epoche ist unmittelbar zu Gott*—"Every epoch is in direct communion with God." Even though the values of the Chinese are not our values, they are God's values, for the Chinese, as it were, are God's children. What *we* must do, said Troeltsch, is to strive to realize the values of the great European *Kulturkreis* to which we are inseparably bound, and hope that God will ensure the absoluteness, the transcendence, of what to mortal eye is wholly relative. Here, it seems, is the *reductio ad absurdum* of this incongruous amalgam of extreme historicism and longing for the absolute. At any rate, relative but transcendent philosophies of history are beyond the pale, so far as we are concerned.

But enough of these excluded types; let us now turn to those which can justifiably be included under the head of historical sociology. The plural pronoun "those" has just been used, but the contrast between the excluded and the included sorts is so great that we might properly regard the latter as sub-varieties, differing merely in minor points, of only one major form.

This form is not cosmically universal, for it is not built about an assumed purpose or meaning or value toward which the cosmos strives. Further, it is not socially universal, for it presupposes no supreme ideal, end, or norm toward which mankind as a whole ought to or does struggle. Neither is it transcendent, for it embodies no intuition or revelation of nor insight into the work-

ings of the Divine Mind, the Absolute, Nature, or Progress. Once more, it is not relative in the sense of extreme historicism, inasmuch as it maintains that certain generalizations can be made that are not entirely limited to specific cultures at specific times and places.

The two sub-varieties into which this major form may be divided differ only in the degree to which the theoretical implications of such a philosophy of history are explicitly formulated. In the first, comprising the less thorough formulations, we may place the theories of Shotwell, Robinson, Durkheim, and more especially Tönnies and Teggart; in the second, the theory of Max Weber.

The writers of the first group agree, roughly speaking, that the trend of social development has been and will be toward a greater measure of accessibility, differentiation, integration, and secularization, paralleled on the personal plane by an increase in individuation, compartmentalization, and rationality. Tönnies, for example, shapes his entire theory in terms of the transition from community to society, *i.e.*, from primary grouping to secondary grouping, and as an inseparable corollary, from mental immobility to mental mobility.⁸ Teggart follows a similar line of analysis, but is more interested in the *modus operandi* of the transition than is Tönnies; he finds it in the breakdown of isolation following upon population movements and communication, which in turn brings about the clash of contending idea-systems and eventual release from traditional inhibitions.⁹

With most of this Weber is in essential agreement, but he qualifies his agreement by the methodological precision of culture case study and the ideal-typical method. A historian commanding a simply stupendous array of data,¹⁰ Weber was properly skeptical of all-inclusive formulæ. From his early agrarian history of the ancient world to his posthumous articles on Pharisaism, Weber was

⁸ Tönnies, Ferdinand, *Fortschritt und soziale Entwicklung*, Karlsruhe, Braun, 1926; *Gemeinschaft und Gesellschaft*, Berlin, Curtius, 1926. Cf. Wiese-Becker, *Systematic Sociology*, 1932, "Tönnies," "isolated sacred structure," "mental mobility," etc. (use index).

⁹ Teggart, F. J., *Theory of History*, 1925; *The Processes of History*, 1918; *Prolegomena to History*, 1916.

¹⁰ As evidenced by his amazing agrarian history of the ancient world contained in *Die römische Agrargeschichte in ihrer Bedeutung für das Staats- und Privatrecht* (Stuttgart, 1891), *Gesammelte Aufsätze zur Sozial- und Wirtschaftsgeschichte* (Tübingen, Mohr, 1924), *Gesammelte Aufsätze zur Religionssoziologie*, 2nd ed. (ditto, 1922-23) and his almost superhuman *Wirtschaft und Gesellschaft*, 2nd ed. (ditto, 1925).

an unflagging advocate of intensive culture case study; he opposed, with fitting acerbity, all efforts to find modern capitalism in the Greek world, or to equate the Middle Ages with the era of the Eupatrids, or to extract illustrations for a rigid sequence of stages of industrial evolution, *à la* Bücher, from the Greek household or workshop. Nevertheless, he did not fall into the abyss of extreme historicism; he not only succeeded in finding *comparable* aspects in analyses primarily intended to render possible the sociological comprehension of particular historical configurations, but he was also able to make some of those aspects *generalizable* through his use of the ideal-typical method. This method makes use of various personality types, types of social processes and structures, and relatively self-contained configurations of such personalities, processes, and structures which are rarely if ever found in an unmixed or "pure" form, but which for purposes of clarity and systematization are dealt with *as if* they so existed.¹¹ The "economic man," for example, is such an ideal type in the writings of the more enlightened *neo*-classical and mathematical economists; he is an abstraction, seldom if ever concretely approximated, and yet considerable insight into economic processes can be gained by thus operating with what is after all a *fiction*. An ideal type, moreover, is never a statistical mode or mean; it is a deliberate accentuation or even distortion of empirical reality for the purpose of gaining scientific con-

¹¹ By far the best discussion of the method to be found in brief compass in any language is given by Theodore Abel in his *Systematic Sociology in Germany*, 1929, 140-156. Weber himself gave no single connected exposition; his methodological analyses are scattered here and there in writings called forth by special occasions. The greater number have been collected in the *Gesammelte Aufsätze zur Wissenschaftslehre* (Tübingen, Mohr, 1922). A good discussion of his basic theories is to be found in the article by Andreas Walther, "Max Weber als Soziologe," *Jahrbuch für Soziologie*, II (Karlsruhe: Braun, 1926), 1-65. An interesting comparison is afforded by Löwith's study, "Max Weber und Karl Marx," *Archiv für Sozialwissenschaft und Sozialpolitik*, LXVII:59-99, 175-214 (1932). Mention should also be made of some other works on his methodology: Hans Oppenheimer, *Die Logik der soziologischen Begriffsbildung, mit besonderer Berücksichtigung von Max Weber*. (Tübingen: Mohr, 1925); Bernhard Pfister, *Die Entwicklung zum Idealtypus* (Tübingen; Mohr, 1928); and Werner Bienfait, *Max Webers Lehre vom geschichtlichen Erkennen* (Berlin: Ebering, 1930). Some attention is paid to ideal-typical method in Wiese-Becker, *op. cit.*, pp. 21-22, 57, *et passim*.

For a brief discussion of the relations of what may be called "culture case study" and ideal-typical method, see the writer's article, "Culture Case Study and Ideal-Typical Method, With Special Reference to Max Weber," *Social Forces* XII, 3 (March, 1934). Only perusal of this article will make clear what is meant by "comparable," "generalizable," etc., in the foregoing sentences. *It originally formed part of the present paper, but was omitted to save space.*

trol over that reality. In short, an ideal type is a device made of the full particularity of history, shaped in such a way that said particularity can be at least partially generalized. To take our economic man again: only in particular historical epochs can even relatively thoroughgoing behavior of the kind he represents be found, *and without knowledge of the non-comparable and comparable particularities of human behavior in those epochs we should not be able to construct our ideal type.* Once he is constructed, however, he may be of great aid in revealing the presence and further ramifications of his behavior in other eras and cultures; moreover, if he has been well constructed the fact that a particular culture does *not* reveal his presence is in itself of great significance—ideal types have negative as well as positive utility.

Now the interesting thing about Max Weber's ideal-typical method, in the present context, is the fact that it makes use of and is made use of by a non-universal, non-transcendent, non-relative philosophy of history. For Weber the prime fact of social evolution was the continuous growth of the rational habit of mind, the habit of abstraction from the concrete and personal, the habit of which *Homo æconomicus* and *Homo scientificus* are such striking instances. But although he devoted his life to the further perfection of *Homo rationalis*, Weber made no explicit value-judgment about rationality; as he so trenchantly said, "Secularization (*Entzauberung der Welt*) and its concomitant rationalization may be good, or it may be bad, but it is our destiny. . . . To him who cannot manfully bear this destiny . . . the doors of the old churches stand forgivingly open . . . if he will but make 'the sacrifice of the intellect.'" ¹² That sacrifice Weber never made or could make, but he cast no scorn on those who did; the vials of his wrath he saved to cast upon the heads of those who fondly fancied they could rationally blend "the best features of both science and religion."

The growth of the rational habit of thought and of its attendant secularization of society, then, was for Weber the strand upon which all sociological concepts must be strung, regardless of the religious or ethical value of that strand. At the same time, he refrained from absolutizing his ideal-typical generalization; although he regarded it as a tendency traceable in the history of all peoples

¹² Weber, Max, "Wissenschaft als Beruf," *Gesammelte Aufsätze zur Wissenschaftslehre*, p. 554.

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at all times, he did not hold it to be irreversible or even exclusive—it merely appeared as the most easily comparable and generalizable trait of all the manifold culture case studies upon which he had so successfully labored.

Here, in the philosophy of history represented by Max Weber, also present in less clean-cut form in the theories of Tönnies, Teggart, and several other writers, we have a form that perhaps may rightfully be included in the field of historical sociology—after all the chaff, the rewarding kernel emerges.

III.

Part and parcel of any philosophy of history, and especially of the ideal-typical variety just discussed, is the conception of stages or phases in social development, the third listed usage of "historical sociology." Closely bound up with the question of stages or phases is that of social "origins," of the "rise" of the family, the state, and what not, the fourth in our list. This in turn is linked with the problems of independent origin, convergence, diffusion, and the like, the fifth of the meanings currently assigned to the term now under discussion. Indeed, a paper on "The Development of Historical Sociology," written in the early nineteen-twenties, devotes about three-quarters of its space to notions of stages, social origins, and the diffusion controversy.¹³

None of the considerations raised by these three denotations of historical sociology are irrelevant, but those clustering about the last two belong primarily in the field of ethnography and ethnology; their strictly sociological aspects are either incidental, or at the most ancillary, if sociology is defined as the science of interhuman relations as such.¹⁴ We shall therefore exclude from the field of historical sociology virtually all treatments of the problems of social origins, diffusion *vs.* independent invention, etc., *per se*; practically everything of sociological significance can be dealt with more satisfactorily when dealing with the third conception, that of stages or phases in social development.

¹³ Barnes, H. E., "The Development of Historical Sociology," *Pub. Amer. Sociol. Society*, XVI:17-49 (1921).

¹⁴ R. M. MacIver, *Society: Its Structure and Changes*, 1931, p. 3; Wiese-Becker, *op. cit.*, p. 37.

Following Ginsberg¹⁵ (in part), we may distinguish four ways in which the notion of stages has been employed; each of these has different roots in the history of social thought, and each possesses a very different value for a sound historical sociology.

First is the conception of stages as regular, undeviating sequences of some part or parts of all cultures (such as forms of the family or of economic organization). This is a late nineteenth-century notion connected with the crude application of the theories of organic evolution to the social field, and has already been thoroughly discredited.

Second is the idea of stages as describing general trends of social development in the culture of mankind taken as a whole. This point of view owes something to modern evolutionary theories, but is most deeply in debt to those older philosophies of history already noted and excluded from the field of historical sociology. At the same time, it has some features that are not entirely irreconcilable with the non-universal, non-transcendent, non-relative type of philosophy of history we have just approvingly discussed. The major weakness of this kind of "stage theory" is the uncritical illustrative method usually invoked to support it: the names of Comte, Hegel, Marx, and Müller-Lyer need but be mentioned to call this weakness vividly to mind.

Third are the much less ambitious attempts of those who frame schemas of change for one or more parts of a total social organization, using the method of culture case study. Theorists of this variety sometimes confine themselves primarily to the development of one culture case, although virtually all of them leave open the possibility that comparable schemas may be found to apply to other cases. Schmoller¹⁶ and Proesler¹⁷ are examples in point: the former worked out a sequence of stages of economic development chiefly applicable to Germany, and the latter made a somewhat similar venture with more explicit attention to the method of culture case study.

Most of the theories discussed under the three preceding heads implicitly or explicitly make use of the principle of genetic con-

¹⁵ Morris Ginsberg, "The Conception of Stages in Social Evolution," *Man*, XXXII:107-132, 87-91, (Apr., 1932).

¹⁶ Gustav Schmoller, *Grundriss der allgemeinen Volkswirtschaftslehre*, Part I.

¹⁷ H. Proesler, *Die Epochen der deutschen Wirtschaftsentwicklung*.

tinuity, *i.e.*, they involve the thesis that subsequent stages arise or evolve out of precedent stages. Writers representing the fourth point of view, thoroughly disillusioned by the excesses of the evolutionary independent originists—excesses plainly exposed by Ratzel and other early diffusionists—leave the question of genetic continuity entirely open. The stages distinguished are not supposed to be descriptive of sequences as they actually occurred; they are merely viewed as ideal types useful as devices for facilitating estimates of rank or quantity, for comparison, and for generalization. Here again the influence of Max Weber makes itself felt; even the severest historical critic of the usual theories of stages, Below, has himself adopted the ideal-typical method.¹⁸

No modern sociologist need feel himself hypercritical when he views the first three types of stage theory with considerable skepticism. The old-fashioned type of unilinear evolution is entirely out of court; the theories dealing with general trends of social development are ramshackle, jerry-built hovels when composed of the miscellaneous scraps collected by the illustrative method; and stages based on the unrefined results of culture case studies alone provide no generalizations that bridge the gulf of extreme historicism. Only the fourth variety, the ideal-typical method of conceiving stages, includes everything of sociological value in the second and third categories, and in addition welds these contributions into a new tool of magnificent form and power.

As already noted, ideal types are heuristic constructions, not definitions or averages. Weber recognized that in dealing with a historical configuration such as Christianity, for example, we cannot hope to seize and embody in a set of words the infinite variety and complexity of the phenomena intended to be called to mind by the term; the full historical reality as such yields nothing which the sociologist can directly utilize in his generalizations. It is necessary to give a special twist to certain characteristics of a set of historical occurrences, and to tie them up with others which may not always be found in such association or do not always take place in the same way, in order that they may be woven into a coherent whole, into an ideal type. In working with the medieval stage of Christianity, to modify our example, there is no sociological point in attempting

¹⁸ Georg von Below, *Probleme der Wirtschaftsgeschichte*.

to gather together the tremendously diverse and even contradictory beliefs, emotions, and modes of behavior of a gigantic congeries of persons alive at any one medieval date. The only way out of formless historicism is the weaving of a sort of limiting concept out of the warp and woof provided by certain dogmatic beliefs, moral ideas, maxims of conduct, and so on, with which the actual reality, as embodied in culture case studies, is then compared. Beyond doubt the strands we use in our weaving are all spun out of experience, and we certainly intertwine them in harmony with our ideas of what is objectively possible—nevertheless, the resulting fabric is confessedly a heuristic construct, a means of generalization, and is never exemplified, in *all* its precision of pattern, anywhere in “the empirical chaos.”

Weber applies this ideal-typical method in many ways, but one of the most important applications is in the study of social development. It is permissible—nay, desirable, because sociologically necessary—to construct an ideal-typical series or sequence-pattern, and then to use this series as a means of estimating the rate and trend of the actual historical occurrences, which in turn form a test of the validity of the ideal type. Instance: if intensive culture case studies of handicraft economies are made, it is then possible to build an ideal type of a handicraft economy, and from it to make deductions which may be verified or refuted by reference to culture case studies; *e.g.*, we may deduce that in a social order of which such an economy is a constituent, the only source of capital accumulation is to be found in ground rent. From this we may infer that the influences leading to a transformation of the system would be found in limited supply of land, population increase, influx of precious metals, and growth in rationalization of conduct. (Weber himself used this identical illustration in his *Wissenschaftslehre*.) The deductions thus made must then be compared with the actual facts, and if they do not fit—as they do not in the so-called “Middle Ages,” for example—the inference that should follow is that the social order in question was not primarily constituted by a handicraft economy, and the investigation proceeds to a deeper level of analysis. If they do fit, the deductions may then be legitimately transferred to other cases having comparable features for further checking, and if repeated transference proves possible, a valid ideal-typical generalization has emerged.

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The notion of stages, therefore, may be a very useful one, so long as a particular stage or sequence of stages is not absolutized, so long as room is left for changes brought by increasing knowledge. If great caution is practiced, it is sometimes even possible to make use of the schemas of stages formulated in and through the old illustrative method, provided they are checked by subsequent reference to culture case studies. In this way our researches into the history of social thought may be made to bear fruit, not only for our general appreciation of past thinkers but *for specific sociological theories of contemporary importance*; our information about the adumbrations of historical sociology to be found in Plato, Ibn Khaldūn, or Turgot may yield more than learned footnotes and the prideful preening of the erudite. To be sure, these writers were not scientists; we expect from them suggestion but not hypothesis. Suggestion, however, may be worth while—*vixere fortes ante Agamemnona!*

IV.

Sixth among the spurious and genuine divisions of the field is the collection of theories, sometimes termed social dynamics, embodying efforts to fix upon rhythms, process-series, sequence-patterns, cycles, and periodicities in social processes and structures.¹⁹ This type of historical sociology must be distinguished from the variety attempting to determine the trend of the *total* process of sociation, for the former commonly deals primarily with process-series of limited scope, e.g., Simmel's "conflict cycle," Bogardus' "race relations cycle," Hiller's "strike cycle," Edwards' "natural history of revolution," Sorokin's "rhythm of contraction and expansion of governmental interference," the "Romanticist-Classical" alternation of the historians of literature, Pareto's "speculator-rentier" sequence-pattern, and so on almost *ad infinitum*. Of the legitimacy and fruitfulness of this kind of historical sociology there can be little doubt; whatever the hardened skeptic may think of the types already considered, he can hardly fail to give his support to this more limited variety if he

¹⁹ See P. A. Sorokin, *Contemporary Sociological Theories*, 1928, pp. 728-41. Excellent bibliography. Cf. Wiese-Becker, *op. cit.*, pp. 76, 505 *et passim*, and L. J. Carr, "Disaster and the Sequence-Pattern Concept of Social Change," *Amer. J. Sociol.*, XXXVIII:207-218 (Sept., 1932).

believes in the possibility of any sociological generalizations whatsoever.

It is in this sub-division of the field that the mutually beneficial natures of historical sociology and systematic sociology, rightly understood, become most evident. Without the problems set by systematic sociology, historical sociology becomes a trackless maze; while without the check on unbridled abstraction afforded by culture case study and ideal-typical method, systematic sociology becomes mere verbal jugglery. As Wiese so aptly says, "It is not a question of either-or, but of the complementary function of two different viewpoints."²⁰

In spite of general agreement as to this complementary function, however, a curious and injurious paradox makes itself evident in contemporary American sociology of the type under discussion; it is this: in studying cycles and rhythms, we are prone to restrict ourselves to data of the present and the immediate past. In other words, we are given to generalizing in what is from at least one aspect historical sociology without properly availing ourselves of historical data!

This failing is in part due to the general ahistoricity of American thinking, as already noted, but a contributory factor is the belief, quite widespread even in countries with more abundant historical humus, that it is easier to check the present than the past, easier to view events *sub specie avi nostri*. Hence, runs the inference, the good sociologist should do his best to gather contemporary material as basis of his theories, and if historical sources are used at all, an apologetic shrug should avow the fact of an inferior substitute.

No such apology is necessary. Without going into all the reasons for this statement, let us adduce a few without comment: (1) the present, as even the most widely experienced person knows it, covers a very limited range; if one wishes to know even a fairly wide sector of the present, recourse must be had to sources of precisely the same type as those made use of by the historian—written records, traveller's tales, etc.; (2) many of the sources indispensable for anything like adequate knowledge of the present will not become available until this present is the historical past—diaries, memoirs, confessions, autobiographies, secret archives, covert diplomatic

²⁰ Wiese-Becker, *op. cit.*, p. 676.

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agreements, uncoordinated statistical material, undercover trade agreements, "cold-stored" inventions, and countless other data vitally affecting this present day and generation are beyond our present reach; (3) almost any hypothesis concerning process-series, cycles, or periodicities one cares to name cannot be adequately checked by reference to the present alone; there must be a wait for an indefinite future verification, or the past must be searched for phenomena presenting comparable and generalizable similarities—no matter how advanced sociology may become, contemporary sources will never provide data in sufficient volume for checking the majority of cyclical hypotheses; and (4) inasmuch as it is exceedingly difficult to lift oneself by one's cultural bootstraps, generalizations based on contemporary data and suggested by contemporary theories alone are likely to be much more relative, short-lived, and fallacious than generalizations in historical sociology have any right to be.

And here with this last point the discussion of the cyclical variety of historical sociology not only concludes, but the wheel comes full circle; we are once more face to face with the problem of "the sociological relativity of sociological knowledge" that we met when we began. But that is another story.

BIBLIOGRAPHY

(Confined to English titles, although most of the valuable material is in French and German.)

- Abel, Theodore, *Systematic Sociology in Germany*, 1929, Ch. IV.
Allison, et al., *A Guide to Historical Literature*, 1931.
Barnes, H. E., *The New History and the Social Studies*, 1925, Ch. V.
Becker, Howard, "Forms of Population Movement," I and II, *Social Forces*, IX:147-160 (Dec., 1930), 351-361 (March, 1931). Discusses method of culture case study.
———"Culture Case Study and Ideal-Typical Method, with Special Reference to Max Weber," *Social Forces*, XII, 3 (March, 1934).
Eliot, Thomas D., "The Use of History for Research in Theoretical Sociology," *Amer. Jl. Sociol.*, XXVI:628-36 (March, 1922).
Flint, Robert, *The Philosophy of History in France and Germany*, 1875.
———*Historical Philosophy in France, French Belgium, and Switzerland*, 1894.

- Ginsberg, Morris, *Studies in Sociology*, 1932, Chs. II, IV, V. This paper owes a great deal, directly and indirectly, to Ginsberg's clear-cut expositions.
- Hobhouse, Leonard T., *Social Development*, 1924.
- Moret, A. and Davy, G., *From Tribe to Empire*, 1926.
- Ogburn and Goldenweiser, eds., *The Social Sciences and Their Interrelations*, 1927, Chs. XVI-XX.
- Ogburn, W. F., "The Historical Method in the Analysis of Social Phenomena," *Pub. Amer. Sociol. Society.*, XVI:70-83 (1921).
- Sorokin, P. A., *Contemporary Sociological Theories*, 1928, Chs. X, XII.
- Spengler, Oswald, *The Decline of the West*, 1926-28.
- Teggart, F. J., *Processes of History*, 1922.
- *Theory of History*, 1925.
- Weber, Max, *The Protestant Ethic and the Spirit of Capitalism*, trans. by Talcott Parsons, 1930. Example of use of ideal-typical method.
- Wiese-Becker, *Systematic Sociology*, 1932, *passim* (use index for key words: "ideal-typical," "historical sociology," "Max Weber," etc.).

CHAPTER III

BIOLOGICAL SOCIOLOGY

THE rapid development of scientific biology after Darwin and its medical applications gave biology a prestige value in the public mind as yet unattained by the sociological sciences. This resulted in the widespread belief that "nature" was far more important than "nurture" in determining social phenomena. Most of the confusion over "heredity and environment" comes from the writings of men who know little biology and less sociology. Most literate and even "educated" people do not realize that the work of Darwin, Galton, Mendel, Weismann, the mental testers and instinctivists, has been largely modified in the last fifteen years. Many teachers in all fields are still in bondage to various forms of nineteenth century biological determinism.

The work of the cultural anthropologists, W. Bagehot, L. F. Ward, J. M. Baldwin, C. H. Cooley, G. Wallas, and others, resulted in the rapid decline of post-Darwinian biological sociology after the beginning of the twentieth century.¹ Many sociologists doubtless minimize too much the effects of biological factors on social behavior because many biologists and pseudo-biologists essay to speak authoritatively on sociological matters of which they know little and to apply to human affairs much doubtful knowledge derived from the study of guinea pigs and insects. But there is little difference of opinion between scientific sociologists and scientific biologists, geneticists and mental testers like Child, Jennings and Freeman. Both groups realize that moot questions can be answered only by careful scientific research in their respective fields and that less than nothing is gained by verbal conflict.²

Biological sociology may be approached from two points of view: 1. by correlating all the data of natality, morbidity, mortality, and

¹ Bernard, L. L., "Schools of Sociology," *Southwestern Polit. and Social Sci. Quart.*, Sept., 1930, 117-134.

² Reuter, E. B., "The Relation of Biology and Sociology," *Amer. J. Sociol.*, Mar., 1927, 705-718; Sutherland, E. H., "The Biological and Sociological Processes," *Pub. Amer. Sociol. Society*, hereafter cited as *P.A.S.S.*, XX:58-65 (1926).

physical types with all the data of the various social groupings; 2. by considering the direct and indirect societal effects of the genetic constitution of group members. Studies of the first type, frequently called social biology, are exemplified by population studies, vital statistics, and medical sociology. The second approach has been chosen here.

Environmental Versus Genetic Factors

Sociologists hold that all social phenomena are conditioned by, and organically related to, the inorganic, organic and cultural environments. Changes in any of these, whether produced by directed or undirected cultural agencies, or by non-human influences, will inevitably and drastically modify societal phenomena. Most of them would probably agree that marked changes in culture, usually mediated by technological devices, which in turn are usually mediated by instrumentalized science, exercise the most dramatic and accelerated influences upon social phenomena. Some of us are in danger of becoming techno-cultural particularists, a position as unscientific and unsociological as any other type of particularistic determinism.

Bernard has shown the importance of the three-fold environment in mediating societal phenomena.³ Others have shown the extensive interaction between environmental factors and genetic constitutions.⁴ The discovery of mutation-acceleration, the effects of temperature, humidity, physical stimuli, drugs, and social situations upon genetic development, leads to the conclusion that environment plays an important part in the final development of the organism, whatever its genetic substrate may be. In general, these factors are physical,—temperature, pressure, humidity, vibration, radia-

³ Bernard, L. L., "The Influence of Environment as a Social Factor," *P.A.S.S.*, XXVI:84-113 (1921); "A Classification of Environments," *Amer. Jl. Sociol.*, Nov., 1925, 318-332.

⁴ Witty, P. A., and Lehman, H. C., "An Interpretation of the Hereditary Background of Two Groups of Mental Deviates," *Amer. Jl. Sociol.*, Sept., 1928, 316-329, show how the data may be explained from both the hereditary and environmental viewpoints, thus demonstrating the absurdity of both extreme positions; Krout, M. H., "Heredity, Environment, and the Developmental Process," *Psych. Rev.*, May, 1931, 187-211; Muller, H. J., "The Method of Evolution," *Scientific Monthly*, Dec., 1929, 481-505; Stockard, C. R., "The Effect on the Offspring of Intoxicating the Male Parent and the Transmission of the Defects to Subsequent Generations," *Amer. Naturalist*, XLVII:641-682 (1913); for C. M. Child, H. S. Jennings and T. H. Morgan, see *bib*; Frank, L. K., "The Management of Tensions," *Amer. Jl. Sociol.*, XXXIII:707-715 (1928).

tion, chemical; organic,—foods, drugs, hormones, enzymes, organic secretions (unless all these be regarded as chemical), microbes, parasites, genetic factors; cultural,—stimuli, inhibitions and facilitations, cultural modifications of organic and inorganic factors; and, finally, the *functioning* of the organism itself.

On the other hand, there are many human biological traits that seem to be determined by relatively stable genetic factors. These are tremendously important in conditioning social interactions. Among these are eye color, stature, longevity, many defects such as some feeble-mindedness, hæmophilia, color-blindness, Huntington's chorea, brachydactyly, diabetes insipidus, retinitis pigmentosa, etc., some (possible) diatheses, sex and ethnic traits. Some of these are definitely influenced by non-genetic factors in development. Thus the biological sociologist finds himself in the same position as the physicist who must "explain" some light phenomena by the wave theory and others by the quantum theory. In our present state of knowledge, some human phenomena can be "explained" by the genetic theory but most of it can best be accounted for by other hypotheses. Most sociologists would agree with Hogben that geneticists can make no valid scientific contributions to biological sociology so long as they continue to under-rate the influence of environment.⁵

If the study of human heredity has so far given us little scientific knowledge applicable to social policies and programs, it has at least destroyed the theoretical foundations of the pre-gene Darwinian, Spencerian, Weismannian, instinct and mental testing biological determinists; has formulated a promising scientific approach to the study of an important factor underlying and conditioning all social phenomena; and has helped to define the problems of nature-nurture interaction.

Modern genetics has shown the inadequacy of Darwinian evolution and has destroyed the dogma of the continuity and immutability of the germ plasm as formulated by Weismann. Like cells do not *always* produce like, somatic and germ cells are not isolated since every body cell has the same chromosome constitution as the germ cells, and the latter are not undifferentiated as Weismann

⁵ Hogben (*cf. bibliography*), p. 120 and Ch. V. Jennings and Morgan agree.

taught.⁶ Jennings has shown clearly the theoretical invalidity of the older genetics and has given a crushing refutation to much of the semi-scientific popular writing on the subject. Emphasizing the fact that the genes themselves develop in a variable environment, hormonal and physical; that the genetic possibilities of the development of any single trait are of the order of 5×10^{15} , he offers convincing refutation to most of the fallacies of "popular" eugenics, to-wit: 1. that like produces like; 2. that heredity is not alterable by environment; 3. that heredity is all important; 4. that superior individuals come only from superior parents; 5. that biology (genetics) requires an aristocratic society; 6. that more superior offspring arise from distinguished parents than from the mass of mediocre parents.⁷

Enough has been said to indicate the fallacy of separating the genetic from the numerous other factors which are continuously influencing social phenomena; that leading geneticists and sociologists agree on the difficulty of their respective tasks and in condemning the over-hasty and unscientific claims of many "popular" geneticists and publicists; also that much light has been thrown upon sociological problems by genetic study, and that more is likely to be shed as geneticists approach their problems with sounder scientific spirit and improved methods, giving due regard to physical, sociological and non-genetic biological factors.

General Considerations

The remaining space will be used to indicate and discuss briefly some of the major divisions of biological sociology and the problems arising therein. For brevity, these problems have been more or less arbitrarily classified as individual, family, race, sex differences, and problems of the quantity and quality of population. Before discussing these topics, some considerations of general import, more or less applicable to all bio-sociological analysis, must be given.

One thing that complicates genetic study is the great modifiability of human protoplasm. There are about 2.65×10^{18} cells in the human body, 9.2×10^9 of which are cortical. If only one million

⁶ Morgan, T. H., *The Scientific Basis of Evolution*, 1932, 180-181; L. Hogben, *op. cit.*, Ch. VI.

⁷ *Op. cit. bib.*, 211-81. See also Morgan, *op. cit.*, Ch. X, "The Social Evolution of Man."

of the latter were connected in groups of only two each in all possible combinations, the result would be a figure of the order $10^{2,788,000}$. But each neurone is probably associated with at least ten others. There are about 2.8×10^9 non-cortical cells in the brain, many of which are directly or indirectly related to the cortical cells. The whole brain-complex is also related to the 4×10^{12} (exclusive of blood) body cells. This incomprehensible number of possible modifiable combination, while subject to great structural limitations, still provides a theoretical basis for the observed plasticity of organic adjustments complicated by all the other environmental factors. The phenomena of conditioned reflexes, harmonic conditioning, morbidic modification, functional (habit) adjustments, and the whole congeries of cultural acquisitions warrant the statement that no two organisms ever develop in identical environments, even identical twins *in utero*.⁸

A second general factor is the instinct concept. This now moribund idea has played an important rôle in the history of biological sociology. No extended discussion is warranted here except to state that no very complicated sociological phenomena can be "explained," by the instinct hypothesis and but few physiological responses of a simple or complex sort are uninfluenced by conditioning factors.⁹

Another danger is the common practice of making uncritical sociological applications of experimental findings in botanical, insect and animal genetics. This is the source of many fallacies in "popular" eugenics and bio-sociological determinism. Certainly more is known about the genetics of *D. Melanogaster* than of any other organism, but it has four (pairs) of chromosomes with (estimated) about 4,000 genes.¹⁰ A human gamete would have 24,000 at the same rate, which, in view of the greater plasticity of human protoplasm referred to above, greatly complicates human genetic study.

⁸ Herrick, Chs. I-III; Hogben, Ch. I; Thomas, final chapter; Pavlov, Child, Holt, Watson, *cited in bib.*; Newman, H. H., "Twins and the Relative Potency of Heredity and Environment in Development," *P.A.S.S.*, XVII:51-61 (1922); Hankins, F. H., "Organic Plasticity Versus Organic Responsiveness in the Development of Personality," *ibid.*, XXII:43-51 (1928); Child, C. M., "Biological Foundations of Social Integration," *ibid.*, 26-42; Thomas, W. I., "The Behavior Pattern and the Situation," *ibid.*, 1-13.

⁹ See Bernard, in *bib.*, for a searching analysis and extensive literature on the subject.

¹⁰ Weinstein, A., *Chemistry in Medicine*, 1928, p. 57.

The environment and (probably) the genetic constitution of *Drosophila* differs vastly from those of man. Since function modifies structure (Child), the end results of the interaction are likely to be so different that analogical reasoning is very precarious. Karl Pearson has recently given a well-merited rebuke to some of our too ambitious eugenicists, as have Jennings, Hogben, and T. H. Morgan.¹¹

Individual Differences

Some individual differences are largely due to genetic constitution, but most *human* differences (cultural) certainly cannot be accounted for in this way. The most we can claim is that the genotype is a factor in the development of the phenotype, operating largely as a facilitating and limiting factor among a complex congeries of other similar factors. The general argument for this conclusion has already been given.

A few years ago the mental testers were much more inclined than at present to account for individual differential social behavior in terms of "general," "native," "innate," or genetic intelligence, often referred to as a "unit Mendelian trait." This was especially true of feeble-mindedness. Now we know that the earlier views were extravagant and uncritical, although we still see such statements as "two-thirds of feeble-mindedness is due to bad stock," and "genius is inherited."¹²

Mental tests are valuable devices for *classifying* individuals with reference to particular performance in whatever the tests test, but such tests throw but little light upon the genetic basis for such performance. It is obvious that so-called "general intelligence" tests test, among other things, educational opportunities, emotional patterns, home attitudes toward school, pre-natal conditioning, health conditions, mental and physical trauma, and the whole reactional biography of the individual. Some evidence of this is found in the comparative Army Alpha scores of northern and southern Negroes and whites, the change in IQ's of foster children, differences in sibs due (possibly) to disease, differences in identical

¹¹ Pearson, K., "Eugenics Now and Hereafter," *Nature*, Dec. 22, 1928, 951-956.

¹² Doll, E. A., "Feeble-mindedness as a State Problem," *Vineland Training School Bull.*, April, 1929, 17-27; Kretschmer, E., "The Breeding and Mental Endowments of Genius," *Eugenics*, Jan., 1931, 6-11. For opposite views, see Spiller, G., "Francis Galton on Hereditary Genius," *Sociological Rev.*, Jan., 1932, 47-56 and April-July, 1932, 155-164.

twins reared apart in diverse environments, differences in order of birth, etc. Of course, the greater similarity of sibs than of non-sibs and of identical twins than of dizygotics, indicates that genetic similarity is also present.¹³ On the other hand, there is some evidence of the direct genetic inheritance of special abilities, notably music and art, though none of them have been carefully studied.¹⁴

One common point of view is the admission that while specific traits are not inherited, "diatheses"—"tendencies" to behave in a certain genetically determined way—are. Susceptibility to various diseases, to crime and other anti-social behavior, are often cited as evidence. In the light of modern knowledge of the effects of sero-immunity, gonadic grafts and other endocrine effects, as well as the other modifiers of organic plasticity, the diathetic argument should be received with caution. All behavior could be interpreted as a diathesis, which seems to mean little more than "potentiality." The attempts at causal explanation of crime on the basis of genetic traits have so far failed. Even the correlations of feeble-mindedness (whether genetic or acquired) and crime have been drastically reduced in recent years and some writers have argued that criminals in general and some types of criminals in particular are equal or superior to the general population in intelligence.¹⁵

The most promising field for the study of individual differences is undoubtedly the phenomena of twinning, especially monozygotics. The biology of twinning is fairly well understood. What remains is to get enough clearly defined cases for analysis by statistical genetics. The most profitable cases are identical twins raised apart. Newman has studied a number with the tentative conclusion that monozygotics reared apart have as great mental differences

¹³ Bernard, L. L., *An Introduction to Social Psychology*, 1926, Ch. XIV; Witty, P. A. and Lehman, H. C., "The Dogma and Biology of Human Inheritance," *Amer. J. Sociol.*, Jan., 1930, 548-563; Freeman, F. N., and Thomas, bib; for one of the best controversial discussions, Lippmann, W., *New Republic*, Oct. 25 to Nov. 29, 1922, and L. M. Terman's facetious reply, "The Great Conspiracy," Dec. 27, 1922, also Lippmann's rejoinder, "The Great Confusion," Jan. 3, 1923. C. T. Pihlblad, "Mental Tests and Social Theory," *Jl. Applied Sociol.*, July, 1926, 27-32.

¹⁴ Popenoe, P., "The Inheritance of Artistic Talents," *Jl. Heredity*, Sept., 1929, 415-423 (very uncritical); Johnson, Guy B., "A Summary of Negro Scores on the Seashore Musical Talent Tests," *Jl. Comparative Psych.*, Aug., 1931, 383-393 (soundly critical).

¹⁵ Sutherland, E. H., "Mental Deficiency and Crime," Chap. 15 in *Social Attitudes*, Ed. Kimball Young, 1931; Zeleny, L. D., "Feeble-mindedness and Criminal Conduct," *Amer. J. Sociol.*, Jan., 1933, 565-576; Murchison, C., *Criminal Intelligence*, 1926. Apparently the children of psychotic parents do not need psychiatric care more than children of normals: Preston, G. H. and Antin, R. A., "A Study of Children of Psychotic Parents," *Amer. J. Orthopsychiatry*, 1932, 231-238.

as dizygotics reared together; in general, the effects of different environment on like heredity is equivalent to the effects of like environment on different heredity, *i.e.*, same sexed dizygotics. What is true for intelligence seems to hold also for temperament, personality and emotional patterns. Considerable variation is found in some physical traits though these appear to be more stable.¹⁶

Another problem of importance is the genetic basis of emotional differences. This has been attacked by the testing technique with inconclusive results; is implicit in the instinct problem referred to above; and has also been studied by the behavioristic approach in child guidance clinics. Watson's three original emotions have been questioned by M. Sherman's recent studies. There is considerable evidence to show that emotional patterns are largely lacking at birth, and hence are mainly conditioned, whatever their genetic basis may be.¹⁷

Another promising approach to individual differences is the study of blood groups. This has assumed great importance in surgery and medicine and is now beginning to be used in genetic and other theoretical research. Little can be said except that blood groupings appear to be dual or triple allelomorphic and thus may aid eventually in the gene-mapping of human chromosomes. There is an extensive literature, little of which has direct bearing on our subject.¹⁸

¹⁶ Newman, H. H., "Identical Twins: The Difference Between Those Reared Apart," *Eugenics Rev.*, April, 1930, 29-34; see also his reports in *Jl. Heredity*, 1929, 49-64, 97-104, 152-156; 1932, 3-18, 297-303; Carter, H. D., "Identical Twins Reared Together," *Jl. Heredity*, 1932, 53-66; Gesell, A., and Thompson, H., "Learning and Growth in Identical Infant Twins," *Genetic Psych. Monograph*, VI:5-124 (1929); Bakwin, R. M., "Similarities and Differences in Identical Twins," *Jl. Genetic Psych.*, Dec., 1930, 373-397; Legras, A. M., *Psychosis and Criminality in Twins*, Utrecht, 1931; Schockking, C. Ph., *The Extension of Twin Research in Holland*, Leiden, 1931, a comparison of 91 one-egg and 95 two-egg twins; Ch. I in Hogben, Ch. IX in Gates, *cit. bib.*

¹⁷ See Watson, Sherman, Berman, Bernard, and Chap. IX-X of Thomas, in *bib.*; also, Faris, E., "Ethnological Light on Psychological Problems," *P.A.S.S.*, XVI:113-120 (1921); Dashiell, J. F., "Are There Any Native Emotions?", *Psych. Rev.*, July, 1928, 319-327; Bain, R., "Theory and Measurement of Attitudes and Opinions," *Psych. Bul.*, May, 1930, 357-379, for 261-item *bib.* since 1925.

¹⁸ Ch. III in Hogben, *bib.*; Steffan, P., *Handbuch der Blutgruppen*, München, 1932, *bib.* of 3000 articles; Furukawa, Takeji, "Die Erforschung der Temperamente mittels der experimentellen Blutgruppenuntersuchung," *Zeit. f. Angewandte Psychologie*, Sept., 1928, 271-299; Ottenberg, R. A., "Classification of Human Races Based on Geographic Distribution of the Blood Groups," *Jl. Amer. Med. Assn.*, LXXXIV:1393-95 (1925); Hooker, S. B. and Boyd, W. C., "The Chances of Establishing Non-Paternity by Blood Grouping Tests," *Jl. Crim. Law and Criminology*, Nov., 1929, 360-363.

Family Differences

Family differences need little discussion, being only a special case of individual differences. There are several major fallacies underlying what Hogben calls the "dreary history of the Jukes": 1. the continuity and unit-determiner concept of the germ plasm, already discussed; 2. ignoring the influence of the multi-environment, especially social conditioning, on the plastic protoplasm; 3. frequently, the assumption of what is to be proved, *e.g.*, that Kallikak's chambermaid was feeble-minded, in the absence of any scientific data about her; 4. imperfect pedigrees, *i.e.*, basing generalizations upon the extremes of the distribution of the family members, those who are in "Who's Who," those in institutions, or who have been convicted of anti-social behavior. We have records of four or five hundred "superiors" and "inferiors" out of a probable 40,000 who have as much (or as little) of the germ plasm of the chambermaid as those of whom we hear nothing. The original genetic traits of Elizabeth Tuttle and Edwards, or of the 1720 Jukes pair, is spread pretty thin by now.¹⁹

If we should take 500 college men and their wives at random from the native white population, with an adult male and female child of each pair and mix them together, it would be quite impossible to put sibs and parents together on the basis of any measurable family resemblances. Human beings are so heterozygous and so modified by their reactional histories that genetic family resemblances are badly blurred. It is quite easy to find individuals who resemble other individuals, either in genetic or conditioned traits, much more closely than they resemble their sibs (excepting the physical traits of identical twins, perhaps) or their parents. This is because there are no genetically pure (inbred through many generations) human families. Exception should be made, perhaps, to some dominant and pure recessive one or two-gene traits referred to above, though Muller has shown that X-ray treatment of the gonads changes dominants to recessives, and *visa versa*. Perhaps other environmental and developmental factors produce similar results.

¹⁹ Gates, Ch. XV, Hogben, Chs. IV, VI, in *bib.*; Darrow, C., "The Edwards and the Jukes," *Amer. Mercury*, Oct., 1925, and Pearl, R., "Biology of Superiority," *idem.*, Nov., 1927, 257-266; opposed to Pearl, see Paterson, D. D. and Williamson, E. G., "Raymond Pearl and the Doctrine that Like Produces Like," *Amer. Naturalist*, June, 1929, 265-273.

Race Differences

Much has been written about race differences, most of it wholly unscientific. Yet out of the wordy confusion, a number of scientific conclusions emerge: there are no pure human races; the terms "inferior" and "superior" are meaningless as scientific terms; the significant differences between "races" are cultural rather than biological; there is pronounced overlapping in all measurable "race" traits; there is slight correlation between race, language, and culture.²⁰

When distinct racial differences are found, as in greater or less susceptibility to disease or differential performance on mental tests, it is difficult to tell whether such differences are due to genetic or conditioned factors. There are differential death rates for various diseases between Negroes and whites, native-born and immigrants, but most students agree that these are not proof of genetic racial differences. The compared groups seldom have similar environments, and if a genetic basis exists, it may be due to the social selection of *individuals*, rather than evidence of racial differences. Dublin found that mortality rates of "racial" groups in this country differ from the European rates for similar groups; which argues against the genetic basis of mortality. Holmes says there is no evidence that Negro-white differential rates are hereditary (genetic) but that the latter may be a factor. Bakwin shows considerable differences in Negro-white infants, but concludes the only genetic one is skin color.²¹

Another important problem is race mixture. There is no conclusive evidence of deleterious biological effects, though sociological results are frequently bad (Reuter). The cross is more variable than the "pure" types (Steggerda) though Herskovits finds American

²⁰ For general discussion, and further references, see Hogben, Ch. V, Hankins, Reuter, Ripley, Holmes, Fischer, Woodruff, *cit. bib.*; Faris, E., "The Verbal Battle of the Races," *Social Service Rev.*, Mar., 1929, 19-29; Krout, M. H., "Race and Culture," *Amer. J. Sociol.*, Sept., 1931, 175-189; Reinhardt, J. M., "The Negro: Is He a Biological Inferior?," *ibid.*, Sept., 1927, 248-261.

²¹ Dublin, L. I. and Baker, G. W., "The Mortality of Race Stocks in Pennsylvania and New York," *Quar. J. Amer. Statistical Assn.*, March, 1920, 1-12; Pearl, R., "Biological Factors in Negro Mortality," *Human Biology*, May, 1929, 229-249; Holmes, S. J., "Differential Mortality in American Negro," *ibid.*, Feb., 1931, 71-106 and May, 1931, 203-244; Bakwin, H., "The Negro Infant," *ibid.*, Feb., 1932, 1-33; Gatewood, M. C. and Weiss, A. P., "Race and Sex Differences in Newborn Infants," *Jl. Genetic Psych.*, Dec., 1930, 31-49.

Negroes more homogeneous than native whites despite the diversity of the African stocks and the American cross-breeders.²²

Sex Differences

Sex differences are of sociological importance, but the genetic basis of many of them is still undetermined. Sex determination is apparently genetic, but we find considerable variation in the sex-ratio at birth, while males show considerable femaleness, and *visa versa*, ranging to well defined hermaphroditism. Nor is sex a stable trait. Disease, especially of the endocrines, age, and possibly diet, produce changes in secondary sex characters during the lifetime of an individual. While males are usually taller, heavier, have larger brains, larger lungs, more strength, etc., than females, there is considerable overlapping; college females now are less anemic, are taller, heavier, and stronger than they were thirty years ago; male Eskimos are slighter in build and not so strong as females; brain weight-body weight ratios of women are slightly greater than those of men; males are more katabolic than females, though much overlapping exists; males are more variable (L. Hollingworth denies this for infants); males have higher morbidity, defect, insanity and mortality rates. Many of these differences are probably conditioned rather than genetic.

The sex ratio of males to females in the United States is about 106 to 100 at birth, but for the "upper" classes, about 112, and for Negroes about 102. In one-child completed families, it is about 117; in two-child, 133; children of alcoholics run as high as 160. Still births are about 135, and male abortions and miscarriages are probably also greater. Winston estimates the conception rate as about 110-120:100. If true, this may require some modification of the XY-chromosome theory of sex determination. The differential viability, variability, and vitality would suggest some genetic basis, though social conditioning might play a significant part in all of

²² East and Jones, Gates, Ch. XVI, in *ibid.*; Linton, R., "An Anthropological View of Race Mixture," *P.A.S.S.*, XIX:69-79 (1925) and Reuter, E. B., "The Hybrid as a Sociological Type," *ibid.*, 59-68; Davenport, C. B., "Racial Crossing in Jamaica," *Sci. Monthly*, Sept., 1928, 225-238; Steggerda, M., "The Physical Development of Negro-White Hybrids in Jamaica, British West Indies," *Amer. Jl. Physical Anthropology*, XII:121-138 (1928); Herskovits, M. J., "Social Selection and the American Negro," *P.A.S.S.*, XX:77-82 (1926); Dunn, L. C., "A Biological View of Race Mixture," *P.A.S.S.*, XIX:47-58 (1925).

them. Some differences, such as hæmophilia and color-blindness, seem to be sex-linked recessives, and the difference in proportions of fatty and muscular tissue, red and white blood cells, and body proportions suggest genetic explanations.²³

Population

The main problems of population center around quantity and quality. Much of what has been said about individual, family, and race differences is applicable here. Most vital rates merely record the results of the interaction between genetic and non-genetic factors and hence have little value for biological sociology as we have defined it.

If we define fecundity as the capacity to produce, and fertility as the actual production of viable offspring, it is evident that reduced fertility need have no relation to fecundity. The fundamental issue in the quantity problem is whether fecundity is declining, though in this Birth Control Age, a population might die out with no decrease whatever in fecundity. Spencer held that industrialization reduced fecundity and some modern students have recently raised the question again. With the decline of Weismann's theory and in accordance with modern genetics, there is no theoretical reason why this should not be true. Hankins cites some evidence, though he is careful to leave the question open. Cases of involuntary infertility are not convincing unless we know something of the frequency of coitus, the technique employed (*e.g.*, there is some evidence that sperm are killed by soap and water), whether there are lethal genes (*i.e.*, each spouse might be fertile with another mate), and especially, whether our collected cases represent a random sample. In any event, it is obvious that we have no valid

²³ Recent literature has not been systematized as in Ploss, H., *Das Weib in Natur-und Völkerkunde*, 3 vols., Leipzig, 1887 and 1902; Ellis, H., *Man and Woman*, 5th ed., 1914; Thomas, W. I., *Sex and Society*, 1907, though such systematization is much needed. See also Pearl, *Biology of Death*, Chap. IV and Thompson, Chap. IX in *ibid*; Morgan, *Theory of the Gene*, 1928, Chs. XIV-XVII; Hollingworth, L. S. and Montague, H., "Comparative Variability of Sexes at Birth," *Amer. Jl. of Sociol.*, Nov., 1914, 335-370; Fetscher, R., "Vererbung und Alkohol," *Int. Rev. Against Alcohol*, Nov.-Dec., 1929, 321-332; Winston, S., "The Influence of Social Status Upon the Sex Ratio at Birth," *Amer. Jl. Sociol.*, July, 1931, 1-21; *ibid.*, "Birth Control, and Sex Ratio at Birth," *ibid.*, Sept., 1932, 225-231. Ward's famous gynæcocratic theory in *Pure Sociology*, Ch. XIV, may still be read with profit.

historical data warranting conclusions about changing fecundity. Cary has shown that about 11% of the males are sterile and 30% have impaired germ plasm, though even this may not be genetic, while Stein reports 20% of 300 apparently sterile couples yielding to treatment. Gini has contended for a cyclical decadence of fecundity which is overcome by race crossing, a position adversely criticized by Lundberg. There is little evidence of diminution of coitus, though sex desire may be either positively or negatively correlated with fecundity. Mills has recently argued that conception rate depends on climate and doctors give many "environmental" causes of infertility (Hankins). Granting our admittedly inadequate knowledge, there is no reason to fear a failure of population from infecundity, though it is safe to predict a continuing decrease of fertility, which may result in actual decline of population in spite of the increasing survival rate. At present, our chief danger appears to be too many people rather than too few.²⁴

The problem of population growth need not detain us long. If fecundity is not declining, as seems probable, population growth is a function of social values, not genetics. Hogben has shown the fallacies of Pearl's logistic curve based on the *Drosophila* analogy that density is an automatic limiting factor even when there is no food shortage. Men in society are not fruit flies in milk bottles. Further, human populations certainly do not follow the Malthusian formula, as far as the positive checks are concerned. Modern societies have always had food production possibilities in excess of population growth. The only plausible explanations of declining rates of increase is limitation by birth control, postponed marriage, etc., or by declining fecundity. The former seems much more probable. Carr-Saunders has shown that attempts have been made

²⁴ Hankins, F. H., "Does Advancing Civilization Involve a Decline in Natural Fertility?" *P.A.S.S.*, May, 1930, 115-122; Cary, W. H., "Some Facts About Sterility," *Birth Control Rev.*, Mar., 1932, 73-76; Stein, I. F. and Leventhal, M. L., "Infertility and Sterility: An Analytic Study of 300 Couples," *Jl. Amer. Med. Assn.*, Feb. 20, 1932, 621-631; Mills, C. A., "Geographic Variations in the Female Sexual Function," *Amer. Jl. Hygiene*, Mar., 1932, 593-600; Mills, C. A. and Senior, F. A., "Does Climate Affect Human Conception Rate?", *Archives Int. Medicine*, Dec., 1930, 921-29; Lundberg, G. A., "The Biology of Population Cycles," a negative criticism of C. Gini's *The Cyclical Rise and Fall of Populations*, 1929, *Social Forces*, Mar., 1931, 401-408; Gini, C., "The Future of Human Populations," *Amer. Jl. Sociol.*, Sept., 1930, 241-250; Dr. Pohlisch, "Alkohol und Nachkommenschaft," *Int. Rev. Against Alcohol*, Nov.-Dec., 1929, 332-343,—no evidence of germ plasm damage. See Harvey, O. L., "A Note on the Frequency of Human Coitus," *Amer. Jl. Sociol.*, July, 1932, 64-70 for review of extant data.

in all societies everywhere to limit population to what he calls the economic optimum. Thompson criticizes the economic optimum but agrees with the social control as opposed to the "natural" control theories of Malthus, Marx, Dumont, Pearl, *et al.*²⁵

The problem of quality has already been discussed by implication under individual, family and "race" differences. A fear frequently expressed is not that numbers will fail, but that the "breeding from below" will result in such deterioration of stock that our proud civilization will crumble. This usually takes two forms: 1. differential increase of feeble-minded, psychotics, Negroes and other "inferior" stocks; 2. that modern medicine keeps weaklings alive and so prevents the "beneficent" working of natural selection. The first position has little or no factual basis, while the second finds no support from modern genetics and evolutionary theory.

The death rates of the feeble-minded are much higher than those of the normal population and the lower the IQ the higher the mortality rates. Of 1000 born, 803 normal males reach age ten, but only 276 idiots, and only 705 morons. Many of these morons will be institutionalized, and even if not, they will not marry, and even if married, their surviving offspring will be very few. If they marry, they are likely to marry their own kind, and thus accentuate the defect if it is a genetic recessive. At any rate, the chances for survival of the moron are less in our society than ever before in history. Dayton doubts whether the psychotics are even reproducing themselves. As for the Negroes, even granting their "inferiority," of which there is no proof, their percentage of the total population has declined steadily since 1790 and will probably continue to do so. The so-called "inferior" economic groups show the same declining birth rate as the "upper" classes and in some European cities they are now equal (Hogben, p. 194). Sydenstricker suggests the same thing is already occurring here.²⁶

The general deterioration through dysgenic medical selection

²⁵ Hogben, Ch. VII, Pearl, *Population Growth*, II, VI, Thompson, II, III, XXIV, Reuter, *Population Problems*, V, VI, *cit. bib.*; Woolston, H. B., "The Dynamics of Population," *Social Forces*, Jan., 1924, 169-177; *ibid.*, "Raymond Pearl: The Biology of Population Growth," *Amer. J. Sociol.*, Nov., 1929, 402-410.

²⁶ *Recent Social Trends*, I:694; Hogben, Ch. VII, Thompson, Ch. X, *bib.*; Sydenstricker, E. and Notestein, F. W., "Differential Fertility According to Social Class," *Jl. Amer. Stat. Assn.*, Mar., 1930, 9-32; Dayton, N. A., "Size of Family and Birth Order in Mental Disease," *P.A.S.S.*, May, 1930, 122-137.

theory is based upon pre-Mendelian genetics. Sydenstricker shows that there has been no reduction of neo-natal mortality (which is probably genetic, at least, in part); that most non-neo-natal infant mortality is "accidental" (dietary, infections, etc.); that there is no significant difference in the morbidity and mortality of high and low infant mortality areas and classes, which is a very significant fact, if true; that many diseases of organic degeneration (heart, cancer, kidneys, apoplexy, etc.) may be the aftermath of infant diseases; and, finally, that there is no evidence of declining vitality in the American people. Dublin states that most of our sick are as sound genetically as the well and would make as good parents—"there is no room for jungle ethics in our society." Pearl and others have shown that longevity is probably a genetic trait anyway, impaired only by "environmental accidents," and shows considerable resistance to these. The hope of vital inversion or rejuvenation held out by Steinach and Voronoff is as yet little more than a hope and almost certainly has no genetic significance whatever its therapeutic value may be.²⁷

It is obvious from this whole discussion that leading genetic biologists like Jennings, Morgan, Haldane and Hogben agree with Sydenstricker (*Recent Social Trends* I:619) that practically nothing is known about genetics that can be applied to a large heterogeneous population. The negative eugenics program is futile, even if it could be applied to the whole population, except in the case of a few dominant one or two-gene defects. The positive eugenics program is almost as futile in the absence of line-breeding for traits upon which there is complete social agreement. For effective positive eugenics we would need a society like that in A. Huxley's *Brave New World*. The modern geneticist agrees with the sociologist that, for the present at least, our best hope is the rational control of war, reproduction, poverty and inequitable, irrational economic arrangements, disease, and the institutionalization of all acquired and genetic social inadequates. If the economic burden becomes too great, a rational society will probably resort to eutha-

²⁷ *Recent Social Trends*, I, Ch. XII; Dublin, L. I., "The Conquest of Tuberculosis," *Harpers Magazine*, April, 1929, 607-615; Pearl, R., "The Inheritance of Longevity," *Human Biol.*, May, 1931, 245-269; Walton, A., "Rejuvenation"; "The Work of Steinach and Voronoff," *Eugenics Rev.*, Jan., 1929, 253-257.

nasia for certain types of social defectives, whether they are genetic or not.²⁸

The general conclusion must be that biological sociology has made few definite scientific contributions to date. The newer genetics has cleared away much post-Darwinian and post-Weissmannian rubbish, however, and has defined its problems so that productive research is now beginning. The same can be said of sociology. Both disciplines are committed to the natural science point of view and methodology. As natural scientists, both groups will cease to indulge in the dogmatism and mutual contempt which has characterized their not-so-recent past and go forward with their common problem, a strictly scientific analysis of the complicated problems of human behavior.

With the research program of the American Eugenics Society, 1926, emphasizing the general problems of heredity, the gene theory, mate selection and race mixture, differential fecundity, net increase of inferior stocks, eugenics and dysgenics of birth regulation, disappearance of old families and the relative importance of heredity and environment, the sociologist will heartily agree.²⁹ He is especially glad to note that modern geneticists recognize the importance of environmental factors. For his part, he is committed to a thoroughly scientific investigation of the cultural environment and the organization and functioning of societal structures as conditioned by the inorganic and organic environments, including the genetic constitution of man.

²⁸ Hogben, Ch. VII, VIII, with reference to 29 papers by Popenoe on "Eugenic Sterilization in California"; Morgan, *Scientific Basis of Evolution*, Ch. X, XI; Thompson, XXI, XXV; Reuter, *Population Problems*, XX, XXI; for an "experiment" in "positive" eugenics, Dachert, A., "Positive Eugenics in Practice," *Eugenics Rev.*, April, 1931, 51-67; for advocacy of legal voluntary sterilization, Rongy, A. J., "Abortion and Birth Control," *Amer. Medicine*, July, 1931, 400-408,—1,000,000 abortions in U. S. annually.

²⁹ Obtainable from the American Eugenics Society, Inc., 185 Church Street, New Haven, Conn. For some sociological discussion of biological sociology, see *Trends in American Sociology*, 1929, Chs. II, III, IV, and for a survey and criticism of the whole subject, Sorokin, P., *Contemporary Sociological Theories*, 1928, Chs. IV-VII.

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BIBLIOGRAPHY

- Berman, L., *The Glands Regulating Personality*, 1922.
 Bernard, L. L., *Instinct*, 1924.
 ——— *Social Psychology*, 1926, Chs. I, V-XVI.
 ——— "Hereditary and Environmental Factors in Human Behavior,"
Monist, XXXVII:161-181 (April, 1928).
 Carr-Saunders, A. M., *The Population Problem*, 1922.
 Child, C. M., *The Physiological Foundations of Behavior*, 1924.
 East, E. M., *Heredity and Human Affairs*, 1927.
 East, E. M. and Jones, D. F., *Inbreeding and Outbreeding: their Genetic
 and Sociological Significance*, 1919.
 Fischer, E., *Die Rehobother Bastards und das Bastardierungs Problem
 beim Menschen*, Jena, 1913.
 Freeman, F. N., *Mental Tests*, 1926.
 Gates, R. R., *Heredity in Man*, 1930.
 Hankins, F. H., *The Racial Basis of Civilization*, 1925.
 Herrick, C. J., *The Brains of Rats and Men*, 1926.
 Hogben, Lancelot, *Genetics in Medicine and the Social Sciences*, 1932.
 Holmes, S. J., *The Trend of the Race*, 1921.
 Holt, E. B., *Animal Drive and the Learning Process*, 1930.
 Huxley, J. S., "Biology and Sociology," *Monist*, XXXIII:364-389 (July,
 1923).
 ——— "The Biology of Human Nature," *Yale Rev.*, XX:333-353 (Dec.,
 1923).
 Jennings, H. S., *The Biological Basis of Human Nature*, 1930.
 Lundberg, Anderson, Bain, et al., *Trends in American Sociology*, 1929.
 Moore, H. H., *American Medicine and the People's Health*, 1927.
 Newman, H. H., et al., *Evolution, Genetics and Eugenics*, 1925.
 Pavlov, I. P., *Conditioned Reflexes*, 1927.
 Pearl, Raymond, *The Biology of Population Growth*, 1925.
Recent Social Trends in the United States, I: Chs. I, XII, 1933.
 Reuter, E. B., *Population Problems*, 1923.
 ——— *The American Race Problem: A Study of the Negro*, 1927.
 Ripley, W. Z., *Races of Europe*, 1899.
 Sherman, M. and I. C., *The Process of Human Behavior*, 1929.
 Thomas, W. I. and D. S., *The Child in America*, 1928.
 Thompson, W. S., *Population Problems*, 1930.
 Thomson, J. A., "Biological Contributions to Sociology," *Sociol. Rev.*,
 XV:85-96 (Apr., 1923).
 Watson, J. B., *Psychology from the Standpoint of the Behaviorist*, 1924.
 Woodruff, C. E., *Effects of Tropical Light on White Men*, 1905.

CHAPTER IV

DEMOGRAPHY, HUMAN GEOGRAPHY, AND HUMAN ECOLOGY

THE human community, in its material or physical aspects, includes three basic factors: population, geographic habitat, and material culture. For purposes of scientific inquiry, these three physically distinct but functionally interdependent classes of phenomena may be treated separately or as interrelated entities. The community may be considered abstractly as a population aggregate composed of individual persons having nothing in common save the fact that they occupy a limited geographical territory. The different human elements may be counted, classified according to common traits, and dealt with in a purely statistical and mathematical way. The same population group may be studied in its relation to the territory it occupies; that is, as a human agglomeration in process of adjustment to a specific physical environment. Again, it may be studied as an organic unit in which the symbiotic relations of the diverse human and cultural elements are the chief objects of attention. Thus considered, the population aggregate represents a functional association of human beings and human activities; in other words, a community.

For each of these three approaches to the study of the human community, a special discipline has arisen. The study of the community as a population aggregate, pure and simple, has acquired the title of demography;¹ the study of the community from the viewpoint of the relation between the population group and the physical habitat is the special function of geography; while the study of the community as a symbiotic unity has recently come to be known as human ecology.

Obviously, then, demography, geography, and human ecology are closely related branches of knowledge. They use much the same fundamental data, but differ in focus of attention and method of

¹ Term first used by Achille Guillard in his *Éléments de statistique humaine ou démographie comparée*. Paris, 1855.

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investigation. A brief survey of the trend in interest and research may help to disclose the essential differences and also the interrelations of these three disciplines.

Demography

Demography may be described in general terms as the study of population aggregates. Wolf defines it more specifically as the "numerical analysis of the state and movement of human population, inclusive of census enumeration and registration of vital processes and of whatever quantitative statistical analysis can be made of the state and movement of population on the basis of fundamental census and registration data."² Demography, therefore, appears to have as its unique field the study of the vital processes of population aggregates. Its initial task is the taking of periodic inventories of population groups and the registration of vital processes. It then proceeds to classify and analyze its fundamental data and to ascertain the movements, vital and spatial, of the population group through time. Its method is statistical and mathematical, and its findings are basic to every other branch of social science.

The progress of demography as a science depends, therefore, upon the efficiency of census enumeration and vital registration; that is, upon the accuracy, extent, and comparability of the fundamental data. The relative backwardness of demographic science and of social science in general is due largely to the fact that census enumeration and vital registration of sufficient accuracy and regularity for statistical and mathematical analysis is of quite recent origin. While a few countries have census and vital registration data of a fair degree of scientific value extending back for a hundred years or more, the practice of national bookkeeping has been developed for the most part within the last fifty years. Even today only about two-thirds of the population of the earth is enumerated at regular intervals. Moreover, vital registration in many countries, including the United States, has lagged far behind census enumeration.

In recent years, however, considerable advance has been made in both census and vital-registration procedure. Demographic data

² Wolfe, A. B., "Demography," *Encyclopedia of the Social Sciences*, V:85-86.

have increased in extent and reliability in most parts of the civilized world. The development in census enumeration has been particularly rapid in the United States. Each federal census since the middle of the nineteenth century has furnished the demographer and student of social science with an increasing volume of statistical information about the population of the nation. According to W. M. Steuart, Director of the Census, the 1930 census of the United States "will comprise more than 30 volumes containing something like 40,000 pages of printed matter, mostly statistical tables. This represents great expansion over the preceding census (1920) when the number of volumes was 11 and the number of printed pages about 14,000."⁸ To be sure, a vast amount of this census material does not relate directly to population, but it furnishes the demographer with an almost unlimited range of data bearing directly or indirectly upon his subject.

The general widening of the range of statistical information relating to population has naturally increased the scope of demographic inquiry and has led to many specialized fields of investigation. The increasing efficiency of vital-registration and morbidity data has given rise to a division of demography in which the subject of attention is the health and vitality of the population. It has also furnished material for many specialized studies of vital processes. Improvement in statistics relating to international migration has opened a field of investigation pertaining to the geographic shifts of population. But this field of demographic inquiry has as yet progressed little beyond the descriptive stage; consisting largely of the collection of data and the determination of the direction of migration.

Another specialized field of demography, but one which the demographer, for one reason or another, has been somewhat loathe to enter, deals with the quality of population. So far, the demographer has limited his task to the description and statistical analysis of differential birthrates of various income and occupational classes of the population. The subject of eugenics has been left for the most part to the student of genetics and the social reformer.

The present stage of demographic inquiry represents the convergence of two somewhat different historic lines of approach to the

⁸ Letter to the author, October 21, 1932.

study of population aggregates. First, the problem approach for which Malthus (1776-1834) set the stage; and second, the statistical and mathematical approach, the most notable early exponent of which was Quetelet (1798-1874), the Belgian astronomer and statistician who was a contemporary of Malthus. While the problem and statistical approaches to demography have never been completely separated, the main objects of attention down almost to the present day have been notably different. The one has emphasized the economic aspects of population growth; the other has stressed the description and analysis of vital tendencies. The former has led to the conceptualization of demography in terms of social problems, such as unemployment, poverty, standard of living, war; and has given rise to a number of subjective concepts—overpopulation, underpopulation, population optimum—which are not amenable to statistical treatment. The problem approach has given demography a peculiarly static connotation and has introduced much heated controversy into demographic investigation. Titles of some recent books reflect the emotional character of this approach: *Mankind at the Crossroads*; *Standing Room Only*; *The Shadow of the World's Future*; *The Menace of Color*; *Danger Spots in World Population*.

The statistical and mathematical approach on the other hand—the true demographic approach—has focused attention for the most part on the biosocial movements of population groups. Its concepts are objective and serve as tools in research. It is in this branch of demography that scientific progress has been made. The general tendency is for the broad population theorist, the person who inherited the Malthusian tradition, to become more of a demographer and less of a philosopher. Most of the recent texts on population abridge the space devoted to a discussion of general theories and stress the analysis of demographic data. This shift of emphasis is of course associated with the rapid increase in the available statistical data on population. Indeed the range of statistical information has become so extensive that the demographer is tempted to pursue his analysis of population into almost every aspect of social relations. Thus a recent textbook on population includes in its table of contents such subheadings as: "The High Cost of Manufacturing in Large Cities"; "Possibilities of Decentralizing Industry"; "Recreation"; "Music and Drama." This merely indicates

that the demographer, like many of his colleagues in the other social-science disciplines, is no longer disposed to confine his attention to what is recognized as the core of his subject, but feels at liberty to carry his analyses into a wide zone of marginal territory.

Human Geography

While there has been rapid advance in demographic science along statistical and mathematical lines—that is, in the definition of terms, refinement of rates, computation of relationships, and the analysis of biosocial tendencies—surprisingly little progress has been made in the geographic phases of the subject. Statistical areas are almost as unscientifically determined today as they were half a century ago. The political unit—nation, state, county, city, or smaller civil division—still constitutes the statistical basis of census enumeration and vital registration. The reason for this is obvious. The purpose of a census is primarily political rather than scientific. It is to provide information for governmental and administrative action rather than for advancement of scientific knowledge.

The national unit in general furnishes an adequate statistical basis for ordinary demographic analysis. Its boundaries are sufficiently stable, and it usually has enough communal and cultural unity to warrant its use as a statistical area for analytic, comparative, and historical demography. The national unit serves the purposes of the descriptive and analytic demographer better than those of the populationist who is interested in computing ratios between numbers and bushels. With the growth of commerce and the general trend toward the economic interdependence of nations, the population theorist has been compelled more and more to compute his population-food ratios on a world rather than a national basis. He is still limited, however, due to the inadequacy of his data, largely to the field of speculation and prophecy. His hypotheses, though interesting, are not scientifically demonstrable.

It is with respect to the fractional units into which the nation is divided that the demographer, particularly the American demographer, has made the least progress. The limitations of the smaller statistical areas as units of demographic inquiry are self-evident. States and counties are purely arbitrary statistical areas with little or no direct relation to the natural grouping of population. The

corporate areas of towns and cities coincide more closely with the actual facts of population patterning, but they are too unstable in boundaries to serve as adequate units for statistical purposes. This applies also to the subareas into which the large cities are divided for census enumeration. The development of the census tract, or small constant unit area, marks the first real advance that has been made in many years in the spatial aspects of demography in this country; however, this procedure is still limited to a few large cities.

Although demographers have paid little attention to the improvement of the spatial aspect of their subject, they attempt to show tendencies in demographic patterning as well as movements in vital processes. They measure and compare densities, and classify populations according to degree of nucleation, that is, according to urban-rural proportions. Such computations and comparisons are far from having the scientific validity that characterize the analysis of biosocial processes. It is impossible adequately to compare densities on the basis of present statistical areas. It is equally difficult to compare urbanization tendencies by the present unscientific procedure in territorial classification. This applies not merely to historical comparison within the country itself but more particularly to comparisons between countries. There is no uniform definition as yet, among the various countries, of the urban-rural concept. The minimum size of the population aggregate used in different countries as a criterion of urbanization ranges from 500 to over 20,000.⁴

Demography and Human Geography

There is a close relation between demography and human geography. The demographer starts with population as his subject of inquiry and carries his investigation into the relation between population aggregates and the territory they occupy. The Malthusian populationist in particular is compelled to consider the geographical aspects of his problem. In order to compute his population-food ratios he must pay almost as much attention to the conditions of the habitat as to the vital tendencies of the inhabitants. The human geographer, on the other hand, focuses his attention upon the physical environment, and carries his analysis through to popula-

⁴ Steuart, W. M., "Urbanization," *Encyclopedia Britannica* (14th ed.), XXII: 893-94.

tion and cultural considerations. Accordingly, the human geographer almost invariably becomes a populationist also. His interest, however, centers chiefly on the visual aspects of human settlement rather than on the statistical analysis of biosocial processes. The systematic geographer, who deals in a general way with the human world, traces the changing pattern of population distribution over the surface of the earth, interpreting it in terms of geographical and cultural factors. He classifies his geographical regions according to the influence they exert upon human activity. In recent years the geographer, at least the regional geographer, has tended to narrow his field of investigation to definite regions. His unit of study is the natural geographic region, in other words, "a district of more than local order of magnitude for which statements respecting forms in the natural or cultural landscapes apply throughout."⁵ Beginning as he does with the unified physical region, he attempts to trace and measure the relations that exist between the conditions of the physical landscape and the superimposed cultural features. In this respect, the regional geographer is concerned with all the visual phenomena of his area, including the cultural activities as well as the population. To the extent that the census provides him with the details of population distribution, it serves as one of his sources of information. The geographer, however, does not rely entirely upon the demographer for his population data. By field investigation, he locates his agglomerations and studies in detail the relations of the human phenomena to the local geographical setting.

Human Ecology

Human ecology differs from demography and human geography in that the main object of attention is neither the population aggregate nor the physical-cultural habitat but rather the relations of man to man. The human ecologist, obtaining his point of view and some of his concepts from the plant and animal ecologists, concerns himself with the nexus of sustenance and place relations of the individuals and institutions which give the community its characteristic form and organization. Basic to the ecological idea is the

⁵ Finch, V. C., "The Influence of Geology and Physiography upon the Industry, Commerce, and Life of a People as Described by Carl Ortwin Sauer and Others," *Methods in Social Science*, edited by Stuart A. Rice, 1931, p. 238.

concept of competition. The underlying assumption is that the fact of a struggle is associated with the function of order.⁶ Competition among human beings involves struggle for position—that is, for a sustenance niche and a spatial location in which the individual or institution may survive and function.

The unit of ecological study is the communal organism, which is at once an aggregation of individual persons, a geographical and cultural habitat, and an interrelated and interdependent biosocial unity. The community thus conceived has many things in common with the plant and animal community. Its component units are bound together by the interdependence which arises out of specialization and division of labor. Its numbers are regulated in aggregate, and in each particular niche or occupation by competition. The characteristic form or spatial pattern of the community—the typical arrangement of population and institutions—is likewise conceived to be a function of competition and competitive-coöperation. The relations of the associational units in the human as in the plant and animal community are dynamic, ever changing in response to environmental factors and ever tending toward an equilibrium or balance. Equilibrium in the modern human community is largely a function of mobility.

The basic difference between human ecology and the ecologies of the lower organisms lies in the fact that man is capable of a higher level of behavior in his adaptation process. As a cultural animal man creates, within limitations, his own habitat. Symbiotic relations in human society represent adjustments to a cultural as well as to a bio-geographic setting. And the fact that culture, or the superorganic, tends toward uniformity within the area of common dissemination of traits furnishes the basis for the similarity of spatial and symbiotic patterns found in widely separated human communities. The human ecologist attempts to discover, classify and explain these typical features of human association. In this respect he differs from the geographer who is concerned more with what is unique or different in the various areas of human habitation.

Research of a distinctly ecological character is limited and fragmentary. To be sure, there is a vast body of material scattered

⁶ See Hamilton, Walton H., "Competition," *Encyclopædia of the Social Sciences*, IV:141-147.

throughout the literature of social science that has ecological significance. But as yet no attempt has been made to systematize and interpret it from an ecological standpoint. The work done thus far pertaining most directly to the ecology of the community tends to fall into two different fields of attention: (1) studies of the spatial distribution of biosocial phenomena within the urban area, and (2) studies pertaining to the determination of the natural—as opposed to the political—boundaries of the local communal organism. The first group of studies originated in social surveys conducted for purely practical purposes, but there has been a gradual development of research in this field motivated by theoretical rather than by practical considerations. Such studies⁷ as *The Ghetto*, *The Gang*, *The Hobo*, *The Gold Coast and the Slum*, dealing with segments of life in the city of Chicago, belong in this latter category. Investigations of this type, however, are not confined to the purely ecological aspects of the situation. They usually include data bearing on social behavior.

In 1923 E. W. Burgess sought to systematize the results of studies made by graduate students in the city of Chicago, and to interpret them in terms of a general, and what he considered to be a typical, pattern of urban expansion. He developed the hypothesis that a city grows in a characteristic fashion through the operation of centrifugal and centripetal forces. By a series of concentric circles radiating from the main business center of the city, he gave graphic representation to what he conceived to be the “ideal” pattern of urban expansion.⁸

On the basis of Burgess’ hypothesis that urban expansion takes place in a wave-like fashion from the center outward, giving rise to culture gradients overtly distinguished by types of dwellings and human occupants, Shaw proceeded to compute juvenile delinquency rates in Chicago by concentric zones from the center of the city to its periphery. His figures indicated a pronounced tendency for the rates to decline with each successive zone outward.⁹ He subsequently applied the same technique to a study of juvenile delin-

⁷ See bibliography.

⁸ Burgess, E. W., “The Growth of the City: An Introduction to a Research Project,” *Pub. Amer. Sociol. Society*, XVIII:85-97 (1923).

⁹ Shaw, Clifford R., *Delinquency Areas*, 1929.

quency in a number of other American cities and found a similar gradient pattern of distribution.¹⁰

Meanwhile, R. C. White made a more extensive application of Shaw's idea in a study of adult criminals and their offenses in the city of Indianapolis.¹¹ Finding that adult crime in that city tended to conform to the gradient pattern of distribution which Shaw found for juvenile delinquency in Chicago, White developed the investigation further by correlating his criminal statistics with other biosocial and economic phenomena, such as family welfare cases, general mortality rates, and percentage of land used for business purposes. He found a high degree of correlation among the phenomena, each series showing a gradient pattern directly or inversely correlated with the crime rates. This type of research indicates the value of the ecological approach to the study of urban social conditions and throws new light on the general processes involved in communal expansion.

The second type of ecological study, and one which has engaged the attention not merely of the ecologist but also of the community planner and business executive, is the attempt to delimit what might be termed the "natural" as opposed to the "administrative" boundaries of the communal unit. Interest in this subject originated with the rural sociologists. Some twenty years ago, C. J. Galpin issued a small bulletin entitled *A Method of Making a Social Survey of a Rural Community*,¹² in which he outlined a technique for determining the boundary of the actual as opposed to the legal village community. A few years later he amplified his technique in his classic little study, *The Social Anatomy of a Rural Community*.¹³

Galpin's idea, and more particularly his method, inaugurated a new era in rural social research. From general discussions of social conditions, students of rural life have turned their attention to more detailed studies of local relations within the village communal

¹⁰ Shaw, Clifford R. and McKay, Henry D., *Report on the Causes of Crime*, Vol. II, Washington, National Commission on Law Observance and Enforcement, 1931.

¹¹ White, R. Clyde, "The Relation of Felonies to Environmental Factors in Indianapolis," *Social Forces*, X:498-509 (May, 1932).

¹² *Circular of Information*, No. 29, The University of Wisconsin Experiment Station, Madison, Wisconsin, 1912.

¹³ *Research Bull.*, No. 34, University of Wisconsin Experiment Station, Madison, Wisconsin, May, 1915.

area. This new approach is basic to the rapid development of rural sociology in recent years.

Interest in delimiting the zones of city influence is of still more recent origin. In fact, most of the objective attempts to delimit the margins of the city community have been made within the last decade, and were motivated largely by practical rather than scientific considerations. The problem has two aspects. The first pertains to the determination of the margins of the local urban area, that is, the area inscribed by the daily shuttling of population between residence and place of employment. This area tends to become an urban unit from the point of view of land utilization and the common use of municipal services. It is therefore considered as the logical territory for city planning and census purposes,¹⁴ and is usually described in terms of population density and municipal functions. Ecologically it may be defined as the area in which local division of labor takes place in a direct and personal manner.

The second aspect of the problem, and one which has received much attention in recent years, is the delineation of the city's local marketing territory, that is, the surrounding area dominated by the city's business activities. Obviously the extent of this territory varies for different kinds of economic service. With the development of motor transportation, particularly the use of the motor truck in local shipments, the trade area has become the geographical unit of operation for an increasing number of business functions.

The first systematic attempt to divide the entire area of the nation into city-trading territories was made by the United States Bureau of Foreign and Domestic Commerce. In an atlas¹⁵ published in 1927, the Bureau outlined the wholesale grocery trading territory tributary to each of the important warehouse centers in the United States. The boundaries of these trade areas were determined by actual merchandising practice as ascertained through correspondence with leading firms. Since then, this same government agency has made a number of commercial surveys of selected

¹⁴ See Fifteenth Census of the United States, 1930, *Metropolitan Districts* (1932), pp. 5-6.

¹⁵ *Atlas of Wholesale Grocery Territories*, Domestic Commerce Series, No. 7 (U. S. Department of Commerce, 1927).

regions.¹⁶ In these later studies, city trade areas are outlined by more careful field investigation. While the procedure adopted by the Bureau is more or less arbitrary, the work has served to stimulate general interest in the regional community concept. Most of the large cities of the nation have in recent years prepared maps of the territory which they consider as belonging to them by virtue of proximity and local communal dominance. Likewise newspapers and other advertising agencies catering to large distributors supply maps and statistical information regarding the scope and merit of the territory accessible to the leading key cities of the nation. While the bulk of this work has no scientific value, its very appearance indicates the rising consciousness of the community as an economic or functional entity rather than a political entity.

Interest in determining the geographic scope of the large city community is no longer limited to the man of affairs. The theoretical student has now taken up the subject. Park and Newcomb have approached it from the standpoint of newspaper circulation. Proceeding on the assumption that the territory dominated by the daily papers distributed from a given center is not only economically but also socially and perhaps culturally tributary to that city, Park and Newcomb have conducted intensive studies of newspaper circulation in the area surrounding Chicago and certain other mid-western cities. Their studies are designed to show not merely the territory dominated by the central metropolis but also the pattern of integration of the entire constellation of centers which make up the regional complex.¹⁷

The regional community, as defined in terms of function, offers a virgin field for ecological research. This complex type of communal organism, emerging in response to motor transportation, represents an institutional readjustment to a new scale of local distance. The functional or ecological region differs from the geographic region in that it is a product of contact and division of labor

¹⁶ U. S. Department of Commerce: *Commercial Survey of the Pacific Southwest*, Domestic Commerce Series, No. 37, Washington, 1930; *Distribution of Dry Goods in the Gulf Southwest*, Domestic Commerce Series, No. 43, Washington, 1931; *Commercial Survey of the Pacific Northwest*, Domestic Commerce Series, No. 51, Washington, 1932.

¹⁷ Park, Robert E., "Urbanization as Measured by Newspaper Circulation," *Amer. J. Sociol.*, XXXV:60-79 (July, 1929). This is part of an extended, but as yet unpublished, study made by Park and Newcomb of newspaper circulation in midwestern territory.

rather than of unity in physical environment. Structurally the ecological region is axial in form. The basic elements of its spatial pattern are centers, routes, and rims. It is composed of a constellation of centers, the interrelationship of which may be described as that of dominance and subordination. Every region is organized around a main center composed of institutions and services which cater to the region as a whole and which integrate it with other regions. The subcenters are seldom complete in their institutional or service structure; they depend upon the main center for the more specialized and integrating functions.

Preliminary investigation and research relating to the regional community has been confined for the most part to attempts to define its area and to give statistical expression to its economic and human resources. While some progress has been made in this regard, no satisfactory technique has yet been devised for determining its various zones of influence or describing its *modus operandi*. Ecological research in this new field of practical and scientific interest requires for its development better statistical data than are available at the present time. In order to trace the important details of population patterning, the statistical areas of census enumeration must be smaller in size and more constant in boundary. It is highly desirable that the census tract, as at present applied to the incorporated areas of certain of our large cities, should be extended to include a much wider reach of regional territory.

Inasmuch as ecological research must take account of the movements of products and people and the spatial shifts of institutions and services, its progress depends upon the development of statistical data from which indices of these processes may be established.

In conclusion I should like to suggest the advisability of establishing a central statistical bureau in each large regional community in the United States. This bureau would collect and organize all official statistics relating to the region and would attempt to standardize and centralize unofficial statistics which have general value for the measurement of change in the internal organization of the community. It is obvious that the regional community has become the basic economic and social unit in American civilization, and, in fact, throughout the modern world. An understanding of the factors in its expansion and ecological organization can be obtained only by a more efficient procedure of social accounting.

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BIBLIOGRAPHY

Demography

- Carr-Saunders, A. M., *The Population Problem*, 1922.
Dublin, Louis I. and Lotka, Alfred J., "On the True Rate of Natural Increase," *Jl. Amer. Statistical Assn.*, XX:305-39 (1925).
Field, James A., *Essays on Population* (ed. by Helen Fisher Hohman), 1930.
Jerome, Harry, *Migration and Business Cycles*, 1926.
Koren, John (ed.), *The History of Statistics*, 1918.
Kuczynski, R. R., *The Balance of Births and Deaths*, 2 vols., 1928-1931.
——— *Fertility and Reproduction; Methods of Measuring the Balance of Births and Deaths*, 1932.
Newsholme, Arthur, *The Elements of Vital Statistics*, new ed., 1924.
Pearl, Raymond, *The Biology of Population Growth*, rev. ed., 1930.
Sanger, Margaret (ed.), *Proceedings of the World Population Conference*, 1927.
Thompson, Warren S., *Population Problems*, 1930.
Whipple, G. C., *Vital Statistics: an Introduction to the Science of Demography*, 2nd ed., 1923.
Willcox, Walter F. (ed.), *International Migrations*, 2 vols., 1929-1931.
——— "Census," *Encyc. Social Sciences*, III:295-300 (1930).

Human Geography

- Barrows, H. H., "Geography as Human Ecology," *Annals Assn. Amer. Geographers*, XIII:1-14 (1923).
Brunhes, Jean, *Human Geography*, tr. by T. C. LeCompte, 1920.
Colby, C. C., "The California Raisin Industry: A Study in Geographic Interpretation," *Annals Assn. Amer. Geographers*, XIV:49-108 (1924).
Huntington, Ellsworth, *The Human Habitat*, 1927.
Ogilvie, A. G., *Great Britain: Essays in Regional Geography*, 1928.
Platt, R. S., "A Detail of Regional Geography," *Annals Assn. Amer. Geographers*, XVIII:81-126 (1928).
Ratzel, Friedrich, *Anthropogeographie*, 2 vols., 2nd ed., 1899-1912.
Sauer, C. O., "Geography of the Pennyroyal," *Kentucky Geological Survey*, 6th ser., XXIII (1927).
Vidal de la Blache, Paul, *Principles of Human Geography*, tr. by Millicent T. Bingham, 1926.
Visher, S. S., "Social Geography," *Social Forces*, X:351-354 (Mar., 1932).

Human Ecology

- Anderson, Nels, *The Hobo*, 1923.
Baker, James, "Symbiosis: Prolegomenon to the Study of Ecology," *Science Progress*, XXV:435-448 (Jan., 1931).

- Brocard, Lucien, "Regional Economy and Economic Regionalism," tr. by F. Cyril James, *Annals Amer. Academy Polit. and Soc. Science*, CLXII:81-92 (1932).
- Burgess, E. W. (ed.), *The Urban Community*, 1925.
- Child, C. M., *The Physiological Foundations of Behavior*, 1924.
- Clements, F. E., *Plant Succession*, 1916.
- Douglas, H. Paul, *The Suburban Trend*, 1925.
- Durkheim, Emile, *De la division du travail social*, 1893.
- Elton, Charles, *Animal Ecology*, 1927.
- Gras, N. S. B., *An Introduction to Economic History*, 1922.
- Hurd, Richard M., *Principles of City Land Values*, 1905.
- McKenzie, R. D., *The Neighborhood: A Study of Local Life in the City of Columbus, Ohio*, 1923.
- *The Metropolitan Community*, 1933.
- Mantoux, Paul, *The Industrial Revolution in the Eighteenth Century*, tr. by Marjorie Vernon, 1927.
- Maunier, René, *L'origine et la fonction économique des villes*, 1910.
- Park, R. E., Burgess, E. W., and McKenzie, R. D., *The City*, 1925.
- Regional Survey of New York and its Environs*, 8 vols., 1927-1931.
- Smith, Sir Hubert Llewellyn (Director), *The New Survey of London Life and Labour*, 2 vols., 1930-1932.
- Thrasher, Frederick M., *The Gang*, 1927.
- Wirth, Louis, *The Ghetto*, 1928.
- Zorbaugh, Harvey W., *The Gold Coast and the Slum*, 1929.

CHAPTER V

COMMUNITY STUDY

I.

THE man on the street claims a knowledge of his community for no reason in particular other than that he lives in it. Why shouldn't he know it? There is an implication in such a claim to the effect that the "community" is an open book to all who have eyes to see and ears to hear. Such is the "common-sense" approach to community appreciation. It is the approach of casual observation which skims the surface of community life and which deduces broad claims and generalities. Manifestly the mere fact of living in a community and sharing in its life does not necessarily endow one with a mystical clairvoyance for penetrating deeply into its life and discovering and understanding its subtle realities.

The zeal of the reformer and the dreams of the idealist have tended to cause such enthusiasts to plumb somewhat more deeply into community life and organization with the more or less expressed purpose, in the first instance, of battling with the slum and of exposing "the shame of the cities,"¹ or, in the second instance, of planting a utopia in terms of some preconceived, ideal plan. The reformatory and idealistic approaches have not been devoid of value. In fact, community study, as a serious proposition, arose out of a great reform movement for the reorganization of neighborhood and community life. This movement gave to community study much of its early impetus and in a great measure determined its scope and methodology. Moreover, no student of the community can overlook the vogue of literary utopianism as an interesting social movement or fail to catch the sociological significance of actual experimentation with utopian formulas, of which experiments no less

¹ Riis, Jacob, *How the Other Half Lives*, 1890; *ibid.*, *The Battle with the Slum*, 1892; Gladden, Washington, *Social Facts and Forces*, 1897; Steffens, Lincoln, *The Shame of the Cities*, 1904; Strong, Josiah, *The Challenge of the City*, 1907; Addams, Jane, *The Spirit of Youth and the City Streets*, 1909; Fiske, G. W., *The Challenge of the Country*, 1912.

than a score have appeared in America. Some of these idealistic communities exist today and furnish the student opportunities for comparative studies into community-forming processes, group integration, and collective action.

Literary efforts at depicting community life and organization have not been limited to utopianism. Realistic treatment at the hands of novelists and poets is frequently revealing and not without some scientific validity. As documents of considerable sociological value, carefully selected novels may meet the needs supplied by case-study material. Howe's *The Story of a Country Town*, Lewis' *Main Street*, Hamsun's *Segelfoss Town*, Anderson's *Winesburg, Ohio*, Zona Gale's *Birth*, Dorothy Canfield's *The Squirrel Cage*, and Masters' *Spoon River Anthology*, in verse, are only a few examples of competent literary treatments of community folkways and mores, local personalities and institutions, and local situations fraught with tensions and stark realities. Many writers of fiction are keener analysts of life and social conditions than many professional students and their writings about the community deserve attention at the hands of such students.

Akin to the ideological approach to community study is the philosophical or speculative approach. Indeed, many of the early treatises on the community from this point of view were largely idealistic although some of them showed an elementary insight into community organization and function which seems quite modern to the present-day reader. To this type of study belong Plato's *Republic* and Aristotle's *Politics*, both of which display considerable objectivity and analytic treatment in handling the subject. Among modern writers on the community, who have approached their task with a philosophical slant, have been Sir Henry Maine,² Ferdinand Tönnies,³ and R. M. MacIver,⁴ for whom the community is a more or less abstract social unit, "a synonym for society." Appropriate abstractions about the community are most certainly valid provided they rest upon a body of concrete and systematized data, but when they represent the cogitations of an arm-chair philosopher they may contribute little or nothing to the content of a general science of sociology.

² *Village Communities in East and West*, London, 1871.

³ *Gemeinschaft und Gesellschaft*, Jena, 1925, 8-38.

⁴ *Community: A Sociological Study*, 1928.

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With the growth of emphasis on technique and methodology and with the development of the welfare and efficiency movements some forty years ago, the social survey, as an approach and a method, took definite form. As early as the 70's the "muck raking" episode began to generate public opinion about community affairs and the decades that followed were marked by a gradual development of public concern about itself. Starting with the Pittsburgh Survey in 1908, there followed in rapid succession an almost unlimited stream of surveying enterprises all over the United States.⁵ Back of these social investigations was a body of public sentiment and an expressed desire "to learn the facts" preliminary to the inauguration of practical programs of community organization. Avowedly the social survey was regarded as a means to an end. It was concerned with "the every-day issues of community life"; it enquired into them, attempted to analyze what it found, formulated proposed courses of action, and sought to give wide currency to its data and proposals.⁶ As a method designed primarily to accomplish results through community action the social survey was successful in many instances; but as a method of studying all phases of community life so as to establish the facts of that life in terms of the natural history of the area, its economic foundations, population and interest groupings, formal organization and functions, most social surveys have dubious value for sociological generalization.⁷ They were for the most part elaborate pieces of social description dealing with "glaring evils and startling injustices."

Another influence on serious community study, which belongs to the period of pre-sociological interest, and which, also, derived much of its impetus from an interest in practical reforms, was the social-settlement movement which emerged into public favor during the closing decade of the last century. The studies of social-settlement workers centered in the conditions and problems of the local neighborhood and it was the congested city district or neighborhood immediately surrounding their settlements that enlisted

⁵ Eaton, Allen and Harrison, Shelby M., *A Bibliography of Social Surveys*, 1930.

⁶ Cf. Elmer, M. C., *Technique of Social Surveys*, 1927; Harrison, Shelby M., *Community Action Through Surveys*, 1916; Taylor, C. C., *The Social Survey, Its History and Methods*, 1919.

⁷ Besant, Walter, *East London*, 1901; Booth, Charles, *Life and Labor of the People of London*, 1892; Rowntree, B. S., *Poverty, A Study of Town Life*, 1901.

their attention.⁸ In fact, it was some time later that the "community" became the area of interest and study. Professor Steiner tells us that it was not until the Great War, with its inevitable centralization of activities and mobilization of people and resources for the prosecution of war measures, that the local community took on a new and vital significance.⁹ From that time on the community has been the focus of attention in a wide-spread movement, or series of movements, for social reconstruction and rejuvenation. These movements have behind them boundless enthusiasm and a more or less uncritical faith in the community as a kind of white hope. They represent local efforts to effect institutional reorganization, legislative reform, and collective action on an almost purely-common sense and idealistic basis. However, the simple community of the past is rapidly disappearing and the community organization movement, in its various expressions, is gradually being compelled to revise its philosophy and direct its energies along new lines. It is not within the province of this chapter to consider the possible and probable lines of development that the movement may take in the future, but it is pertinent to suggest that students of the community will attempt to understand the changing movement as an interesting problem in community organization and that eventually programs of social reconstruction will be based on a scientific analysis of the more fundamental processes of community life and social change.

It was about twenty years ago that the study of the community seemed to pass rather definitely from the realm of pre-sociology to that of a scientific sociology. Dr. Warren H. Wilson was probably the first to attempt to define the functional community which he did in terms of "a team haul,"¹⁰ and in 1914, C. J. Galpin made a careful and thorough analysis of rural human relationships with the result that he discovered what he designated "the social anatomy of an agricultural community,"¹¹ and demonstrated a simple and

⁸ *Hull House Maps and Papers*, 1895; Woods, Robert A., *The City Wilderness*, 1898; and *Americans in Process*, 1902.

⁹ Steiner, Jesse F., "An Appraisal of the Community Movement," *Pub. Amer. Sociol. Society*, XXIII:15-29 (1929). E. C. Lindeman in writing on "The Impact of Urbanism on Rural Areas and the New Rural Community," *ibid.*, XXII, 288-289, considers the community movement as one of the war's casualties.

¹⁰ *The Evolution of the Country Community*, 1912, 79.

¹¹ *The Social Anatomy of an Agricultural Community*, Research Bull. 34, Wis Agri. Exp. Station, 1914.

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objective method of determining community boundaries which other students have followed with little modification. With the start given by Galpin the interest in the real nature and functions of the rural community grew apace and for about ten years the rural community was studied more assiduously than was the urban community. Just why this was so can only be conjectured. Perhaps the relative simplicity and smallness of the rural community was responsible for the earlier attention it received as a social and economic unit for objective study. However, in 1915, Robert E. Park published an article on "The City: Suggestions for the Investigation of Human Behavior in the City Environment,"¹² in which he outlined a procedure for ascertaining the forces inherent in the city community and suggested the use of the city as a sociological laboratory. The papers by Galpin and Park stimulated new methods of studying the community as a social process and product and introduced the ecological approach. They marked the beginning of a definitely objective and critical attitude that did not characterize community study in its earlier stages. The scientific study of the community as something other than a geographical or political area or an aggregation of persons or a constellation of institutions was inaugurated. From the standpoint of science, there remain too many philosophies, assumptions, and untested theories in community study, but the way has been opened for the social scientist to apply his techniques, which are gradually being improved, to the further unbiased and realistic treatment of the community.

II.

In spite of the considerable progress that has been made in the last decade in devising and using scientific methods of procedure and technique, the limits of the field of community study have remained more or less indefinite. In fact, they are, if anything, more confused than they were. It almost appears as if the students of the community may find themselves sooner or later without a field of their own unpreempted by investigators in the related fields of rural sociology, urban sociology, human ecology, and regionalism. The "neighborhood," which, as a social unit of special

¹² *Amer. Jl. Sociol.*, XX:577-612.

interest, once competed with the "community" for attention, has by now largely passed out of the picture, so to speak, although some promoters of social programs are still investigating what they choose to call the "neighborhood community."¹³ The influences of cultural anthropology and social psychology, particularly as they have affected techniques and methodologies as well as definitions, have brought to the fore the concept of the "culture area," or the "community area," as it is sometimes called, as a unit of investigation and analysis.¹⁴

The concept "area" has been established by usage for a number of years in community studies, especially in studies of the urban community. In the ecological process of distribution there results a differentiation of the community into areas which are found to conform, in their main characteristics, to typical patterns. Therefore, the student of the city community becomes familiar with such areas as the slum area, the bright-light area, the area of furnished-rooms, the suburban area, and so on. "Urban areas" have been the objects of intensive study in recent years, particularly at the University of Chicago, and have been made to contribute to the sum total of knowledge about the urban community.¹⁵

As the natural area, with its natural population groupings and its distinguishing body of attitudes and sentiments, is conceived as a typically segregated physical portion of the community so the community is now being recognized as contained within a larger integrated unit, the region or the super-community. The region, too, is a natural area possessing its own physiographic features, its peculiar economic and social organization, and its characteristic socio-psychical aspects. As a unit of study the region is tending to crowd the community and may eventually displace it. The concept

¹³ Barrows, Esther G., *Neighbors All*, 1930; Perry, Clarence A., "The Local Community as a Unit in the Planning of Urban Residential Areas," *Amer. J. Sociol.*, XXXII:219-221; *ibid.*, "City Planning for Neighborhood Life," *Social Forces*, VIII: 98-100; *ibid.*, "Tangible Aspects of Community Organization," *ibid.*, 558-564; *ibid.*, "A Step toward Community Definition," *Pub. Amer. Sociol. Society*, XXIII:332-333.

¹⁴ Cf. Wessel, Bessie Bloom, *An Ethnic Survey of Woonsocket, R. I.*, 1931; *ibid.*, "The Community Area as the Unit for the Study of Ethnic Adjustments," *Pub. Amer. Sociol. Society*, XXIII:338-339. These studies belong to a series on "The Study of Ethnic Factors in Community Life."

¹⁵ Burgess, E. W., "The Growth of the City: An Introduction to a Research Project," Ch. II in *The City* by Park and Burgess; Shaw, Clifford R., and Associates, *Delinquency Areas*, 1929; Wirth, Louis, *The Ghetto*, 1928; Zorbaugh, Harvey, "The Natural Areas of the City," *Amer. J. Sociol.*, XXXII:188-197; *ibid.*, *The Gold Coast and the Slum*, 1929.

of the region, which had been developed by the geographers, starting with Ratzel,¹⁶ and being refined by Vidal de la Blache¹⁷ and Brunhes,¹⁸ has had its possibilities for purposes of sociological study explored by McKenzie,¹⁹ Mukerjee,²⁰ and others among the growing number of human ecologists.²¹ Upon the foundation provided by the conceptions of natural area and the region there is gradually being worked out a methodology for the study of regions, belts, and large natural areas and the communities contained within them. Community study is gaining thereby an enrichment of data and a valuable method. On the other hand, if it is to be saved from complete absorption by the ecological approach and method the students of the community must work beyond the limitations of ecology and devote themselves to the more difficult task of investigating the increasing non-territorial relations of human beings: the theoretical and universally significant aspects of the problems of acculturation, social interaction, and collective behavior of natural population groups inhabiting natural areas and sharing in certain fundamental respects a common life. In so far as human beings, living together, participate in common undertakings, share their mutual ideals and purposes, and function under the nexus of commonly held laws and customs, social heritages, and collective symbols, they may be said to be *of* the community as well as *in* the community. Such "living together" in an ecological frame of reference is the legitimate field of community study.

Rural sociology and urban sociology are mainly specialized fields of community study. Each has explored, with a truly sociological method, the functioning of the rural and urban environments, respectively, in relation to special problems of group life, and each

¹⁶ Ratzel, Friedrich, *Anthropogeographie*, Stuttgart, 1899.

¹⁷ Vidal de la Blache, Paul, *Principles of Human Geography*, 1926.

¹⁸ Brunhes, Jean, *Human Geography*, 1920.

¹⁹ McKenzie, R. D., "The Ecological Approach to the Study of the Human Community," *Amer. Jl. Sociol.*, XXX:287-301 (Nov., 1924); *ibid.*, "The Scope and Method of Human Ecology," *Pub. Amer. Sociol. Soc.*, XX:141-154 (1926); *ibid.*, "Ecological Succession in the Puget Sound Region," *ibid.*, XXIII:60-80 (1929).

²⁰ Mukerjee, Radhakamal, *Regional Sociology*, 1926.

²¹ Bogardus, E. S., "Social Process on the Pacific Coast," *Pub. Amer. Sociol. Soc.*, XXVI:1-9 (1932); Chapin, F. Stuart, "A Cooperative Study of the Northwestern Central Region of the United States," *ibid.*, XXII:202-204 (1928); Dawson, C. A., "Population Areas and Physiographic Regions in Canada," *Amer. Jl. Sociol.*, XXXIII:43-56 (July, 1927); Hayner, Norman S., "Ecological Succession in the San Juan Islands," *Pub. Amer. Sociol. Soc.*, XXIII:81-92 (1929); Smith, J. R., *North America*, 1925.

has contributed much to the literature on the community. As the old differences between urban and rural communities continue to fade and as rural and urban become more and more only relative matters, the fields of rural and urban sociology will tend to merge more definitely into a sociology of the community. These tendencies have been noted by students for some time and are critically measured and interpreted by the President's Research Committee on Social Trends in its recent report and monographs.²²

The field of community study cannot be rigidly defined. The community itself is a constantly changing social entity, not without some stability, to be sure, a certain amount of social coöperation, and a certain degree of permanency, but with boundaries that tend to be increasingly flexible, functions that are altered in response to the demands of a super-community social system, and interests that have to compete with non-localized group interests for the allegiance of the people.²³ The field of community study and the methods to be employed in exploring it must be adaptable and suited to the changed and changing conceptions of the community. For the purposes of scientific study it is highly important that the looseness with which the concept "community" has been applied in the past be replaced by a fairly uniform, but not too static, definition in order that data may be accumulated, compared, and classified to the end that a generalized theory of community life may be established. Such a working definition we have attempted to supply.

III.

The problems of community study may be treated under two heads: problems of analysis and generalization and problems of community action. Problems of the first type lie almost entirely within the scope of science, while those of the second type lie primarily in the field of community planning and secondarily in the province of science. The first are concerned with the underlying

²² *Recent Social Trends in the United States*, Vol. I, esp. Ch. IX, "The Rise of Metropolitan Communities," by R. D. McKenzie, and Ch. X, "Rural Life," by J. H. Kolb and Edmund de S. Brunner. See also the Social Trends Monographs on *The Metropolitan Community*, by McKenzie, and *Rural Social Trends*, by Brunner and Kolb, 1933.

²³ Steiner, Jesse F., *Community Organization*, 1930, Ch. II; Wood, Arthur Evans, "The Placé of the Community in Sociological Studies," *Pub. Amer. Sociol. Soc.*, XXII:14-25 (1928).

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principles and fundamental theories of community life, whereas the second are concerned, in the main, with the practical business of living in communities and in reorganizing community life and institutions according to certain preconceived aims, and only incidentally with trends, tendencies, and processes. The social scientist is interested in the former and in the incidental features of the latter, while the social reformer, the politician, and the promoter have little interest in the former but are attracted by the more superficial and so-called "practical" phases of the latter. In the discussion of problems which follows, the emphasis will be placed, for obvious reasons, upon problems of community analysis and the basic principles and processes underlying community action.

Historically speaking, the early scientific studies of the community centered chiefly around the problems of community structure and function. Here and there certain local communities were subjected to more or less objective observation with the result that descriptive materials about them appeared.²⁴ These studies served the useful purpose of focussing attention upon the community as a unit of study, revealed some of the possibilities of research available on every hand in the community laboratory, and blazed the trail for intensive and quantitative studies at a time when most students of society were engaged in other directions. Moreover, it was discovered, apparently for the first time, that the social scientist, who is primarily interested in developing and refining a body of systematic knowledge about human society, may find all the forces and processes of that society represented in some form or other in almost any sizeable community.

A. Community-Structure

The problems of community structure will receive slight attention here because they are principally the problems of human ecology and are treated in another chapter.²⁵ Nevertheless, since the other problems of community study find their basis and frame of refer-

²⁴ Vincent, George E., "A Natural History of a Society," in Small and Vincent, *Introduction to the Study of Society*, 1894; Williams, J. M., *An American Town*, 1906; Wilson, W. H., *Quaker Hill: A Sociological Study*, 1907; Sims, N. L., *A Hoosier Village: A Sociological Study with Special Reference to Social Causation*, 1912; McKenzie, R. D., *The Neighborhood: A Study of Local Life in Columbus, Ohio*, 1923.

²⁵ Chapter IV.

ence in the ecological order of the community, it may not be amiss to indicate in this place what some of the important problems of structure are.

The structural pattern, both ecological and social, of the community tends to adjust itself to the topography of the situation and to the varied requirements of the inhabitants. The general outline of structural development is determined by the operation of many forces and tends to assume typical forms, while at the same time being characterized by innumerable variations. The community has a natural history as well as a history and the processes of structural growth are among the problems of vital interest.²⁶ Modifications of structure follow increase in size and movements of population, and change in functions. Population groups and institutions are located with respect to the community configuration, and within this framework social groups integrate and disintegrate in a continuing process of adjustment to the changing ecological and social orders. Many modern communities, both urban and rural, are characterized by shifting boundaries and by increasing heterogeneity and complexity. Group and area disorganization and reorganization go on within the community frame of reference. Due to improved means of transportation and communication the locality no longer holds the members of the community as it formerly did, and functional or special-interest groups are steadily displacing the older primary-group patterns.²⁷ Instability of communal relations in the larger centers due to increasing mobility has been measured statistically whereas the tendency of the village to acquire greater stability is also capable of statistical proof.²⁸ The relation of population density, mobility, and distribution to community organization, institutional disorganization, and personal demoralization is a factor of large importance in community study.²⁹

²⁶ Burgess, E. W., *op. cit.*; Park, R. E. and Burgess, E. W., *The City*, 1925, Ch. III; Steiner, Jesse F., *op. cit.*

²⁷ Carpenter, Niles, "Urban Expansion and Neighborhood Change," *Social Forces*, IX:80-84; Kolb, J. H., "Special-Interest Groups in Rural Society," *Pub. Amer. Sociol. Soc.*, XXII:211-213; Steiner, J. F., *Community Organization*, Ch. I.

²⁸ Fry, C. Luther, *American Villagers*, 1926, Ch. III; *Recent Social Trends*, I:443-451, 509-517.

²⁹ Bowman, LeRoy E., "Population Mobility and Community Organization," *Pub. Amer. Sociol. Soc.*, XX:133-137; Elmer, M. C., "Maladjustment of Youth in Relation to Density of Population," *ibid.*, 138-140; Kolb, J. H., "Family Life and Rural Organization," *ibid.*, XXIII:146-152; Landesco, John, "Prohibition and Gangsters: A Chicago Community Study," *ibid.*, 330; Mowrer, E. R., "Family Disorganization and Mobility," *ibid.*, 134-145; *ibid.*, *Family Disorganization*, 1927, Ch. V; Reckless, Walter C., *Vice in Chicago*, 1932.

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Finally, community study should undertake the task of classifying community types according to their characteristic structural patterns and ecological features. Factors of morphology, dominance, ethnic composition, community plan, arrangement of natural areas, etc., may well serve as bases for a variety of classifications of communities and their sub-divisions. The surrounding regions or hinterlands may be subjected, likewise, to useful classification.

B. *Community Functions*

Inhabitants of a community have long taken for granted the performance of certain functions by the community and these functions have become conventionalized and more or less standardized throughout larger inclusive cultural areas. As community life becomes more complex and interdependence increases the community functions tend to be expanded to include many secondary ones.³⁰ It is not sufficient for the student of the community simply to be aware of them. As relatively essential features of modern community organization they challenge the research interests of the sociologist. Nearly every textbook on urban or rural sociology devotes a section or more to descriptive and historical treatments of several of these functions, but only fairly recently has much study been devoted to their essentially sociological features and theoretical implications. Lynd and Lynd in their work on *Middletown* did an excellent piece of research, by use of the cultural approach, into the minutiae of life in a contemporary American city, including the study of a number of community-wide functions.³¹

Then there are functions which characterize community life and organization which are not strictly community functions in that they are not community-wide in scope and are not community responsibilities, but do belong to the community in a very real sense, often determining to some extent its characteristic pattern of distribution of population and institutions and being affected, in turn, by its size, organic complexity, and mechanisms of social interaction. Frequently these functions establish "centers" in the midst of the community's structural configuration, such as busi-

³⁰ Anderson, Nels and Lindeman, E. C., *Urban Sociology*, 1928, Part II; Wood, Arthur E., *Community Problems*, 1928.

³¹ Lynd, R. S. and H. M., *Middletown: A Study of Contemporary American Culture*, 1929, esp. Part VI.

ness centers, fashion centers, theater districts, and newspaper rows.³² A functional analysis of the community may serve to test the principal of ecological distribution as well as to discover the rôles of community functions in terms of their genesis and development, their inter-relationships, their influences on and responses to the mores and formal organization of the community, and their validity as measured by their reactions to the tests imposed upon them by the social and economic requirements of the changing local situation.³³

The functional relations of the local community to its hinterland have received considerable attention of late.³⁴ Studies of service-areas, begun by Galpin and his students, in the examination of farm-to-trade-center relationships,³⁵ have been followed by similar studies into the service relationships between the large urban centers and their respective tributary areas. These relations and the changes occurring in them afford a fruitful field for continued study as revealing the processes of urbanization and ruralization of the rural and urban communities, respectively.³⁶

The community, by reason of its very nature as a unit of interacting persons and groups, functions as a reservoir of social controls. Not only does the local community reflect and transmit through its various institutions and agencies the controls impinging on it from without, but it generates and adapts controls to suit its own

³² Cf. Anderson and Lindeman, *op. cit.*, 72-80; Haig, R. M., "Towards an Understanding of the Metropolis," *Quart. Jl. Economics*, XL:179-208, 402-434 (Feb.-May, 1926).

³³ Cf. Elmer, M. C., "Evaluating Community Activities," *Social Forces*, VI: 85-90 (Sept., 1927); Thompson, J. G., *Urbanization, its Effects on Government and Society*, 1927.

³⁴ Cf. Duffus, R. L., *Mastering a Metropolis*, 1930; Gras, N. S. B., *An Introduction to Economic History*, 1922; McKenzie, R. D., "The Concept of Dominance and World Organization," *Amer. Jl. Sociol.*, XXXIII:28-42 (July, 1927); Williams, J. M., *The Expansion of Rural Life*, 1926, Ch. IV.

³⁵ Galpin, C. J., *Rural Life*, 1918; Hoffer, C. R., "Services of Rural Trade Centers," *Social Forces*, X:66-71 (Oct., 1931); *ibid.*, *A Study of Town-Country Relations*, Mich. Agri. Exp. Station, Special Bull. 181; Kolb, J. H., *Service Relations of Town and Country*, Wis. Agri. Exp. Station, Research Bull. 58; Zimmerman, C. C., *Farm Trade Centers in Minnesota*, 1905-1929, Minn. Agri. Exp. Station, Bull. 269.

³⁶ Clark, Carroll D., "Some Indices of Urbanization in Two Connecticut Rural Towns," *Social Forces*, IX:409-418; Douglass, H. P., *The Suburban Trend*, 1925; Gillette, J. M., "Urban Influence and Selection," *Pub. Amer. Sociol. Soc.*, XXIII:1-14; Park, R. E., "Urbanization as Measured by Newspaper Circulation," *Amer. Jl. Sociol.*, XXXV:60-79 (July, 1929).

needs and purposes. The community as a maker and enforcer of social controls is, therefore, another problem for community study.³⁷

Among the community controls attention needs to be given especially to the local mores, their nature and variety, and particularly their unique local features, their geographic and social range of influence, and their relations to other cultural factors. Maintenance, leisure-time, æsthetic, business, political, and other sets of mores should be measured, analyzed, and compared.³⁸ Institutionalized patterns of behavior also require attention, especially as they reflect indigenous elements in the community's life and as they display the effects of the impact of ecological and social change. Study should also be made of community leadership, its traditions, rôles, and personalities. These and other community controls should be studied with the framework of the whole life of the community and in terms of community needs and agencies.³⁹

Theoretically, the community exists for the purpose of meeting certain human needs and in so far as it functions toward that end it develops the appropriate agencies and institutions for carrying out its purposes.⁴⁰ The extent to which it is functioning or failing to function adequately can be determined by case studies and quantitative tests that have been tried in practice.⁴¹ We have already observed the evidences of community disorganization in terms of group and area disorganization, and at this point we must note the obvious fact of community disorganization in terms of functional weakness and inefficiency, and institutional disintegration and personal demoralization. Under the impact of crises, such as

³⁷ Cf. Anderson and Lindeman, *op. cit.*, 367-372.

³⁸ See Lynd and Lynd, *op. cit.*, 21-409, for a penetrating study of such functions and mores as those concerned with "Getting a Living," "Making a Home," "Training the Young," "Using Leisure," and "Engaging in Religious Practices" by the people of a small city. In the Introduction will be found a lucid explanation of method.

³⁹ Cf. Burr, Walter, *Community Leadership*, 1929; Sanderson, Dwight, *The Rural Community*, 1932, Ch. IX; Sanderson and Nafe, Robert W., "Studies in Rural Leadership," *Pub. Amer. Sociol. Soc.*, XXIII:163-175 (1929); Swift, Arthur L., "The Rôle of Religious Institutions and Community Control," *ibid.*, XXVI:178-179

⁴⁰ Cf. Lindeman, E. C., *The Community*, 77-97.

⁴¹ Colcord, Joanna C., *Community Planning in Unemployment Emergencies*, 1930; Kirby, James P., "How the Community is Organized in the Face of Pressing Relief Problems," *Social Forces*, IX:582-584; Pettit, Walter W., *Case Studies in Community Organization*, 1928; Wilson, Robert S., *Community Planning for Homeless Men and Boys: The Experience of Sixteen Cities in the Winter of 1930-31*, Family Welfare Association of America, 1931.

the present economic depression, the weakening of community controls and the breakdown of community functions are apparent.⁴² To a degree the failure of the modern community in a functional way is accounted for by its structural incapacity and defectiveness.

A classification of community types according to their characteristic functions constitutes a part of community study. McKenzie has constructed such a classification under four general types.⁴³ Students may well undertake to test and, if possible, to revise this classification in the light of the many factors of ecological and social change.

C. Socio-psychological Aspects

More subjective but no less important are the socio-psychological aspects of community study. In so far as the community serves as a dynamic stimulus; to the extent that it evolves its own distinctive culture, attitudes, and habit patterns, and personality and social types; to the degree that it plays a rôle in determining family, group, and personal status; in so far as it is in a unique sense a center of competing and conflicting forces; and to the extent it develops its peculiar community consciousness, it is an object of sociological investigation and interpretation in its own right. Next to the family and the neighborhood the local community functions very definitely in the socialization of behavior. The social self, social projection, and conformity are prominent in the community thinking of persons.⁴⁴ For these reasons the community may serve, in a special sense, as a sociological laboratory.

Heretofore, perhaps a disproportionate amount of attention of students has been directed to the study of the more definitely pathological phases of these aspects of the community's life. This may have been due to their more apparent and sensational features, or it may have been a natural sequence of the reform interest which

⁴² Cf. Bowman, LeRoy E., "Community Organization," *Amer. J. Sociol.*, XXXVI:978-984 (May, 1931), and XXXVII:924-929 (May, 1932).

⁴³ Park and Burgess, *The City*, 1925, 66-68. See also Gillette, J. M., *Rural Sociology*, 1922, Ch. V, for an attempt to do the same for rural communities.

⁴⁴ Anderson and Lindeman, *op. cit.*, Part III; Bernard, L. L., *An Introduction to Social Psychology*, 1926, Chs. VI, XXII, XXVI-XXVII; Carpenter, Niles, *The Sociology of City Life*, 1931, Ch. VI; Willey, M. M., "Community, Socialization, and the Country Newspaper," *Pub. Amer. Sociol. Soc.*, XX:245-248 (1926); Williams, J. M., *op. cit.*, Chs. XI, XIII, XVIII-XIX, XXII-XXVIII.

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played such an important part in the beginnings of sociology in this country. However, the fact should not be overlooked that the local community is the locale of normal human beings, institutions, and coöperative relationships, as well as of those classed as "social problems." If study of the latter contributes to a more complete understanding of the former, then they will continue to be studied. The objective and critical student will study whatever the community affords.

Community study may legitimately claim as its field those areas where rural and urban cultures and attitudes meet and interact together with the hybrid cultures resulting therefrom. Inter-community and intra-community group and personal interrelationships, where in any way derived from or dependent on the community as a habitat, also furnish material for study. At this point the fields of social psychology and community study are in juxtaposition and mutually assist each other.

D. Community Action

Community action is commonly thought of as referring to practical programs or movements participated in by the members of the community for the accomplishment of some specific purpose. In so far as such efforts are the more or less conscious and deliberate reactions to an underlying community unrest and feeling of dissatisfaction or unsatisfaction, a following out of natural tendencies and trends in harmony with the community mores, an expression of critical attitudes and enlightened public opinion, a joint project in which groups and interests participate for the community's sake and not for the self-interest of certain groups or persons, then such action is properly subject-matter for community study. Fly-by-night undertakings, promoted from without or imposed from above, and foreign to the fundamental interests and aims of the community, are interesting social phenomena, but do not contribute anything essential to our subject.

Community organization through community action is a social process and needs to be studied as such. Typical community movements such as community planning, community chests, public health organization, recreation programs, etc., to the extent that they are truly community processes, based upon substantial ascertained facts

of local community life, and representing the coördination of community forces, may be so analyzed as to serve the ends of social science. Such analyses, if applied to a sufficiently large number of cases of comparable community movements, should reveal much concerning the processes of social change and contribute valuable data for purposes of social control.⁴⁵

IV.

Community study, conducted in the spirit and with the methods of social science research, may serve to confirm or to revise sociological theory. The community, as a measurable social unit, is variable and dynamic and needs to be approached by the student with tentative conceptions and suspended judgment, but it is no more subject to change than most of the social groups with which the sociologist is destined to work. In the modern community social theories are being tested and the observer, who is well grounded in the theoretical principles of his science, will be amply rewarded if he chooses it as the field of his labors.

BIBLIOGRAPHY

- Galpin, C. J., *The Social Anatomy of an Agricultural Community*, Research Bull. 34, Wis. Agri. Exp. Station, 1914.
 House, Floyd N., *The Range of Social Theory*, 1929, Ch. VII.
 Lindeman, Eduard C., *The Community*, 1921.
 Lynd, R. S. and H. M., *Middletown: A Study of Contemporary American Culture*, 1929.
 Queen, S. A., "What is a Community?" *Jl. Soc. Forces*, I:375-382 (May, 1923).
 Sanderson, Dwight, *The Rural Community*, 1932, Chs. I and XVI.
 Steiner, Jesse F., *The American Community in Action*, 1928.
 ——— *Community Organization*, 1930, Ch. II.
 Wood, Arthur Evans, *Community Problems*, 1928, Ch. I.
 ——— "The Place of the Community in Sociological Studies," *Pub. Amer. Sociol. Soc.*, XXII:14-25 (1928).

⁴⁵ Bernard, L. L., "Research in Rural Social Control," *Pub. Amer. Sociol. Soc.*, XX:249-59; Bowman, LeRoy E., "Local Community Studies and Community Programs," *Social Forces*, VIII:493-95; Burgess, E. W., "The Value of Sociological Community Studies for the Work of Social Agencies," *ibid.*, 481-91; Melvin, Bruce L., "Research in Group Organization," *Pub. Amer. Sociol. Soc.*, XX:264-7; Street, Elwood, "Some Community Uses of Sociological Studies," *Social Forces*, VIII:496-7 (June, 1930).

CHAPTER VI

RURAL SOCIOLOGY

RURAL sociology, like other fields of sociology, came into existence to fulfill a need. The need was the desire and the obvious necessity of developing a scientific understanding of rural life. Before the beginning of the twentieth century rural life appeared to be comparatively simple and easily understood. The farm family was self-sufficing to a considerable extent and the immediate neighborhood or community marked the range of contacts which its members ordinarily had. But all of this was changed when modern methods of agriculture developed and rural free delivery, telephones, and automobiles came into general use. Many problems were created and numerous adjustments were necessary. Among the more important conditions or circumstances which appeared to be confusing and for which the light of scientific information was needed the following may be mentioned: changes in the rural population and the growing importance of cities, a decline in rural neighborhood activities, a change in the rôle of the rural church, the consolidated school movement, and the effects of all of these influences including the utilization of the science of agriculture on the personality of the farmer.

Of course, these problems did not develop simultaneously, but most of them appeared within the first two decades following 1900. Previous to this time some attention had been given to the social aspects of rural life in the United States and partly as a result of this effort the Country Life Commission was appointed by President Roosevelt in 1908. Soon after the report of this Commission appeared courses in rural sociology were introduced into college curricula and the writing of textbooks began.

It is not within the scope of this chapter to review in detail these developments although such a treatment would be interesting. It is sufficient to state that the subject has made a rapid and substantial growth, and that the comments in later paragraphs of this chapter about problems in rural sociology are not intended to be a criticism

of work done already but are suggestions for further development. Rural sociologists have met their responsibilities in a creditable manner. The subject is now offered in all of the leading universities, colleges, normal schools, and theological seminaries in United States. Numerous textbooks have appeared and many bulletins have been published. Research work has been done and is being done by numerous agricultural experiment stations and other agencies. The growth has been rapid and prospects for its continuation are encouraging. It is desirable, nevertheless, to outline the field of Rural Sociology and indicate some of the problems, particularly those of a theoretical nature, which are involved.

The Rural Population. The development of rural sociology demands a careful analysis of the rural population from the standpoint of its composition and major characteristics. This applies to both the populations in the open-country and in incorporated towns having less than 2,500 inhabitants. Already the United States Census has recorded the facts about numbers of rural people and their distribution as well as certain data concerning age, nativity, marital condition, and occupation. It is significant that in the Fifteenth Census a division is made between the rural-farm population, that is, persons living on farms outside of incorporated places of 2,500 or more, and the rural non-farm population, that is, the people not engaged in farming who live in incorporated places of less than 2,500 in population or in unincorporated places. This division is an important one and will be a great asset in the development of this phase of the subject, for obviously marked differences exist between these two groups. This classification is only a beginning, however. Detailed facts concerning migration are not at hand except where special surveys have been made and these have pertained usually to numbers of persons migrating from the rural areas to towns and cities. The characteristics of the people involved in this movement and the effects of it on the population remaining in the country have not been studied with sufficient definiteness to permit significant generalizations. It is pertinent to know who leaves the rural area, where they go, what occupations are followed after leaving the farm, and the amount of wealth the migrants eventually take from the rural area in the form of inheritance. Recently, however, since the prolonged period of unemployment, a reverse movement has developed, for many people have migrated

from the city to rural areas. But even so, the city population has had a rapid growth and since 1920 it has exceeded the rural part of the population in the United States.

Problems Created by Growth of Cities. The consequences of urban growth are numerous and, in so far as they have an influence on the well being of the rural population, they come within the purview of rural sociology. These influences may be divided roughly into two groups: (1) those which affect the rural people in a general way without reference to their place of residence, and (2) those influences which in addition to the foregoing affect the population within the immediate hinterland of the city. The increased dominance of cities in matters of finance and communication and a greater impact of urban culture on the rural population is a general influence which is important. Only in the realm of politics does the rural element tend to hold its former place of influence. Especially is this true in state legislatures where representation has been determined on a territorial basis before the phenomenon of city growth. Nevertheless, the urban way of life and urban culture have been brought into more direct contact with rural life and rural culture. The result has been chaotic. While there has been a tacit assumption since the Middle Ages that urban life is superior to the rural, the assumption has not been proven satisfactorily to either the city or country resident. Somehow it has not been possible to adopt completely the urban manner of living in rural areas though many conveniences first developed in cities have found their way into the country. Rural people tenaciously cling to certain of their cultural patterns. It remains for the rural sociologist to study these to the extent that their value may be known and interpreted from the standpoint of the rural people themselves as well as from the standpoint of national well being. For example, some people contend that the open country church has passed its climax of usefulness as a social institution in well settled areas and that plans should be made for its gradual abandonment. Others, not a small minority by any means, maintain that such churches are indispensable in the development of a contented farm population and a virile rural culture.

The influences of cities on the rural areas adjacent to them are even more marked. New types of agriculture may develop and rural communities may have an influx of population whose interests

are primarily associated with the city. If these migrants become numerous a state of community disorganization is apt to occur. This disorganization is manifest in all phases of community life but is especially noticeable in local government. Most counties which previously have been rural are confronted by the fact that the growth of a city within their border necessitates more services of government, but the increased expense falls most heavily on the rural part of the population. A study and interpretation of these and other circumstances especially in ways that will indicate the mutual interests and responsibilities of both groups is a task which needs to be done and one which definitely falls to the rural sociologists.

Relationships of Small Cities and Towns. The relationships of small cities (cities approximately less than 10,000 in population) and towns to the rural population in farming areas deserve more careful study. These places are important not only because they serve as marketing and retailing centers but also because they tend to be the focal point for professional services and the educational, civic, and religious organizations of farm people. It is necessary in this connection to study the services offered by these trade centers in order to know what grades and varieties of goods they can sell profitably and what purchases they may encourage on the part of rural people. In the past, country residents have purchased only limited varieties of goods but the adoption of a modern standard of living is changing this practice and the demands of farm people are becoming similar to those of other groups. Merchants in rural trade centers may help or retard this endeavor of farm people to have a higher standard of living depending upon the quality and variety of goods which they keep in stock and the degree of efficiency they maintain in merchandising them. Rural sociologists have answered only part of the questions which arise in this connection, for they have studied chiefly the number and variety of services trade centers of various sizes offer. The quality of goods which are kept in towns of various sizes and the effects purchases of different qualities have on the farmer's standard of living still demand consideration.

The Organization of Rural Communities. The town or small city has significance also in the field of rural community organization. It forms the hub or center of the rural community and con-

sequently has an important influence on its development. This relationship to the community has not always been recognized by town residents who tend to look to larger cities for social guidance and economic prosperity. Furthermore, the act of incorporation gives the town or small city a certain independence and control of community agencies which it might not otherwise have. The result, as rural sociologists have pointed out already, is disadvantageous to the farm people, for, although they contribute to the maintenance of the town, they have no legal representation in its affairs. The matter is complicated also by the fact town residents are likely to have attitudes which are characteristic of the urban dweller whereas rural people maintain the viewpoint of the ruralist. It may happen, therefore, that the contacts of these two groups are conflicting rather than coöperative. Yet, since both are part of a community situation, there must be mutual interest involved which may be discovered and definitely described by research work in rural sociology. In other words, more studies of the contacts occurring between farm and town residents within the same community and the effects they have on its development in all probability would contribute to the theoretical understanding of community processes and would furnish practical information for the improvement of town-country communities.¹

These matters lead to a consideration of the area or areas which may be designated as belonging to a particular community. Ever since the book, *Rural Life*, by C. J. Galpin was published in 1918, the town and its contiguous rural trade territory have been considered the area in which community processes occur. The matter is not so simple now since specialization has been developed in many ways, for it appears that numerous community activities or services require more people than exist in a single town and its trade area. Before, therefore, the subject of rural community organization can be understood adequately in a scientific sense it seems necessary to determine what is the minimum population requirement or the minimum financial basis for various kinds of community projects.

¹ Some studies already completed are: Denune, Perry F., *The Social and Economic Relations of the Farmers with the Towns in Pickway County, Ohio*, Ohio State University, Bureau of Business Research; Kolb, J. H., *Service Relations of Town and Country*, Wisconsin Agricultural Experiment Station, Bulletin 58; Page, J. F., *Relation of Town and Country Interests in Garfield County, Oklahoma*, Oklahoma Agricultural Experiment Station, Bulletin 194.

This limit can be determined fairly successfully in the fields of trade, or in other services in which the effect of competition is the determining influence, but it is more difficult in the case of schools, churches, hospitals, libraries, and other similar agencies.² Yet such information is much needed and is what the public, including social scientists in other fields, expect the rural sociologist to contribute. If it happens, as now seems evident, that many community services require the population of two or more town-country communities to support them, then the necessity of inter-community coöperation is established. But, since custom and tradition sanction independent action on the part of rural people, the problem of displacing customary and traditional or even prejudiced action with rational behavior is unavoidable. Here the principles of social psychology applied to the rural situation may be expected to help. The determination of the minimum requirement, in terms of either population or financial resources, is thus a basic problem in the development of this phase of rural sociology. The problem of the optimum number of people or amount of resources is still more difficult to determine but its solution may be expected to follow logically after the determination of the former.

Another problem in rural community organization which has not received the careful attention of rural sociologists relates to the number and variety of organizations to which persons of various ages and occupations may belong and may be expected to support. Up to the present time major emphasis in this regard has been placed on the number and variety of organizations in a community and the integration of their programs rather than on the relationships of individuals to them. But, valuable as this approach is, it cannot answer the question just stated for the number and variety of organizations in a community depend upon the number the people can support or are willing to support. This must be determined by studying individuals, not organizations.³ Already the com-

² See: Kolb, J. H., *Service Institutions for Town and Country*, Wisconsin Agricultural Experiment Station, Bulletin 66; Hoffer, C. R., *A Study of Town-Country Relationships*, Special Bulletin 181, and *Public Health and Educational Facilities in Michigan*, Special Bulletin 207, Michigan Agricultural Experiment Station; Melvin, Bruce L., *Village Service Agencies*, New York, New York Agricultural Experiment Station, Bulletin 493; Zimmerman, Carle C., *Farm Trade Centers in Minnesota*, 1905-29.

³ The Bulletin by Garnett, W. E. and Seymour, A. C., entitled *Membership Relation in Community Organization*, Bulletin 287, Virginia Agricultural Experiment Station, contains results of a study of community organization from this standpoint.

plaint is made by some rural residents that there are too many organizations and too many meetings to attend while in the same community other persons will have practically no contacts, or, at least, very few contacts sponsored by organizations. An analysis of this aspect of community organization may be of great significance in both a theoretical and practical way. Theoretically, it apparently would help in understanding the influence of group contacts on personality wherein the final synthesis of community influences is made. Practically, a knowledge of the relationship of individuals to organizations of various kinds might change or redirect the prevailing practices of many organized groups. Such information may cause the emphasis to shift from numbers and variety of organizations which have tacitly been the chief consideration to the fulfillment of the needs of various individuals in the community as the ultimate goal.

The study of organizations and their relationship in a community still deserves further consideration, however. There is an important distinction between community organization and organizations in a community. The former term implies that the programs of all organizations are sufficiently integrated so that the welfare of the community is enhanced, the latter merely means that organizations exist. It seems to be true that one aspect of community life cannot advance beyond a certain point without a corresponding advance in other aspects as well, but the degrees of this interdependence of community functions are not known and hence there is frequently a waste of effort and disappointment in uncoordinated endeavors to promote community development. It is a truism in community organization as in other phases of human life that the neglected group is the one which eventually creates difficulties. An example of the neglect of individuals which may occur is the case of farm youth or rural young people approximately 15 to 25 years of age. Although there are many organizations in rural communities it appears upon investigation that after passing the period of active interest in 4-H Clubs young persons frequently are not provided with an organization or with leadership suitable to their needs. Here indeed is an important problem which, if neglected, may have serious consequences, so far as the future development of rural life is concerned. Even the 4-H Club movement has not been sufficiently interpreted from the standpoint of rural sociology, although

some bulletins dealing with this aspect have appeared. This club movement has had a phenomenal growth and while general observation warrants the assumption that through club activities the objectives of the 4-H's—head, hand, heart, and health—are realized, a statement of these results in scientific manner would give greater security and added impetus to the work.

Rural Social Institutions. A more thorough analysis of the principal rural social institutions than has been made hitherto is a future task of rural sociology. The rural family may be mentioned first. The phenomena of family life have been observed for generations and it is certain that this institution makes an indelible impression on the personality of both adults and children. A scientific analysis of its influences is needed. Casual observation shows that within the same community great variations in family life will exist. Backward, anti-social families may be found in progressive communities and progressive families in backward communities. The discovery and interpretation of these variations is an appropriate task of rural sociology. Furthermore, the rural family is especially important because the farm enterprise is dependent upon a stable family life. Already many investigations, especially the studies of the rural standard of living, have considered the farm family (or household) as the unit of investigation. But most of these studies have been concerned chiefly with the amount and distribution of cash expenditures and the utilization of facilities for living which are furnished by the farm.⁴ Studies emphasizing the processes of family life such as family coöperation, family disorganization, and parent-child relationships are needed also and would be a fitting sequel to the work already done.

The rural church as a social institution has received a considerable amount of attention from rural sociologists. The importance and value of this institution is unquestioned. The main problems now relate to finding out how this institution can most successfully accomplish its purpose. The location of the church building which

⁴ For examples see: Anderson, W. A., *Living Conditions Among White Land Owner Operators in Wake County, North Carolina*, North Carolina Agricultural Experiment Station, Bulletin 258; Black, J. D. and Zimmerman, C. C., *Family Living on Successful Minnesota Farms*, Minnesota Agricultural Experiment Station, Bulletin 240; Kirkpatrick, E. L., *The Farmers' Standard of Living*, United States Department of Agriculture, Department Bulletin 1466; Von Tungeln, G. H., and Others, *Cost of Living on Iowa Farms*, Iowa Agricultural Experiment Station, Bulletin 237.

was mentioned in an earlier paragraph is still an unsettled problem and probably cannot be solved until more information of a scientific nature is available concerning the influence of a church. If the matter were a question of religious instruction only it might be more easily decided. But many churches in addition to giving religious instruction and inspiration furnish opportunities for numerous informal social contacts among rural people. The effects of these contacts on the personality are so closely related to the strictly religious phase of the church program that probably the most significant results will be attained by studying the entire program of churches in communities of various sizes in order to discover the effectiveness of each one in relation to the social progress of the rural population.

The rural school as a social institution is an important agency in the improvement of rural life and, therefore, it comes within the scope of rural sociology. Fortunately this institution is established by law, so that the chief concern of the sociologist along with educators is to make sure that adequate school facilities are maintained. This objective is especially difficult to obtain in sparsely settled rural areas and the mere cataloguing and interpretation of the school facilities of rural youth in any state is in itself an important contribution.⁵ Consolidation has seemed to be the most tangible remedy and the effect of consolidation on the community justifies this assumption. However, consolidation is not possible in certain areas so it is logical to study the programs of one-room district schools for the purpose of finding out how they may be expected to accomplish maximum results.

Technical questions regarding the program of the school may be left to educators but it is distinctly a problem in sociology to determine the relationship of the content of the curriculum to the well being of the pupils and the community. Questions pertaining to the control of the school also have sociological implications. It is an interesting fact that educators are inclined to favor centralized control, usually on a county basis, whereas parents often favor local control. Certainly there are social values involved here which are unknown, or at least not generally known. Otherwise, differences

⁵ Kumlien, W. F., *The High School Education of Farm Boys and Girls in South Dakota*, South Dakota Agricultural Experiment Station, Bulletin 250, is a study of this type.

of opinion would not arise so frequently. The discovery of the values involved is a problem which the rural sociologist has not investigated sufficiently.

The need for adult education is generally granted and the school as an educational institution has a responsibility to the community in this direction. It is especially pertinent from the standpoint of the community to have the sociologist ascertain the methods which are most effective in the instruction of individuals not in school and the effects different curricula have on the improvement of the community. The principle of democratic government is based on the assumption that all citizens will participate intelligently in the affairs of government. Obviously, this assumption cannot be realized unless some form of education is developed for persons when they cease to attend regular classes in the schools. A scientific understanding of adult education as a social process is a great need at the present time. In regard to method, it is pertinent to make the observation that adult education like other forms of education is basically a group process. Leaders in agricultural extension work have grasped this fact. County agricultural agents now spend a considerable portion of their time either in organizing groups to carry out their program or in working with groups which are already in existence.

Rural government as a social institution provides an excellent field for study and interpretation from the standpoint of rural sociology. The book appearing under the title, *Rural Municipalities*, by T. B. Manny, marks the beginning of a new development in the field of rural sociology. Government has such a vital relationship to the well being of the rural population that a thorough study of it from different approaches is justified. A few suggestions follow. It is important to know first of all what the social values of existing forms of rural government are. Political scientists and others have contended with much persistency and consistency that many units of government in rural areas are so small that efficient and effective administration is impossible. The remedy, they maintain, is to consolidate existing units when too small in order that efficiency in administration of public affairs may be attained. On the other hand, rural residents just as consistently maintain that this consolidation is not desirable. Centralization takes from them the

opportunity of observing closely the governmental activities which affect them in important ways and the argument that higher salaries will have to be paid for individuals who have charge of governmental affairs in a centralized plan is invariably made. The matter finally resolves itself into a question of whether local governmental units, such as townships, shall be dominant in rural affairs or whether a larger, more centralized unit shall be adopted. The answer cannot be determined entirely on the basis of economy, for the small unit affords opportunity for practical experience in governmental affairs which many people prize highly. Such experience is one important means of self-preservation for a local group, which, for that very reason, makes the small governmental unit seem important if not indispensable to them. The contribution of rural sociology in this matter will consist, it is hoped, in putting into a definite, understandable form the social advantages and disadvantages of these units. It is always desirable to replace opinions with facts, for even a selfish politician cannot wholly disregard facts. He may not use them or interpret them in a manner agreeable to the social scientist, but if facts are available and generally known they must be recognized.

Another problem in local government relates to the distribution of benefits which any particular unit of government offers. This matter as already indicated is particularly complex in an area where there is considerable heterogeneity in the population. In a county that is partly urban and partly rural it is exceedingly difficult to have the benefits and responsibilities shared by the people in an equitable manner. The support of welfare work which has become a great financial burden in recent years in some states may be used as an example. It often happens that workers in the city will prefer to live outside its corporate limits in order to have the advantages of less expensive housing and an opportunity for growing some produce. Yet if these workers need aid the rural township or town is obliged to support them and numerous townships have become financially bankrupt in trying to meet the obligation. If, on the other hand, all relief is administered on a county basis, then it may happen that the township farthest from the city will contribute more to welfare work than is expended in its area. For the solution of situations such as these more facts pertaining to them are needed.

The rural weekly or semi-weekly newspaper is an important

social institution and while the studies of Willey⁶ and others have contributed greatly to an understanding of its rôle, further investigation is possible and advisable. Compiling a record of events which interest people is significant sociologically, but the local newspaper does more. Through the selection of news items, editorials, and contributed articles it also can bring to the attention of readers certain questions which might otherwise be overlooked. If this editorial selection and writing is skillfully done the paper can help people to integrate their thinking about public questions and a consensus of opinion about community matters may be reached. Then definite action may be expected. Consequently, the study of the newspaper as an influence in the formation of opinion about questions pertaining to the local community seems to be a fertile field of investigation for rural sociologists.

The Standard of Living. This concept has furnished a basis for numerous investigations by rural sociologists in the United States⁷ and a large amount of data is available regarding expenditures of farm families and the quantity of goods furnished by the farm. Certainly these studies point to the fact that farm income provides but does not insure the enjoyment of a high standard of living by farm families. The standard of living of a family is determined not only by income but also by numerous factors such as custom, tradition, approval or disapproval of associates and other influences. Research to discover more definitely the effect of these influences appears to be one of the next steps in the advancement of research projects dealing with this subject.

Another phase of the standard of living relates to what may be called efficiency of living. Seldom do two families having approximately equal resources and facilities for living secure the same degree of success in the use of income. The reasons for this are not definitely known but an analysis of these differences would be very suggestive for families who desire to make the greatest possible use of the resources at hand. One practical project in this connection would be to make a study of the buying habits of farm families in order to discover what quantities and qualities of goods they buy

⁶ Willey, M. M., *The Country Newspaper*, 1927.

⁷ Many of these are summarized and interpreted in *The Farmers' Standard of Living*, by Kirkpatrick, E. L.

and the circumstances which influence the selection of a particular grade or quality of a commodity whenever choice is possible.

The practices of rural families in regard to insurance, savings, and provision for education of the children are not well understood. These matters have great importance in determining the security and progress of rural people. Frequently, it appears, provision for such expenditures is postponed until the need for them arises. Then the amount needed is so large that the family has difficulty in meeting the expense. More attention to this problem on the part of rural sociologists especially interested in the field would be a welcome addition to the contributions which have been made. Investments in farm land have been considered more desirable than any other by a majority of farm people but recent financial conditions have greatly modified their views in this matter. They need dependable facts regarding a savings program which will actually insure the security of the family.

It is desirable also to have more detailed analyses of the influences which facilities offered by communities exert on the standard of living. One family working independently of others cannot provide itself with a hospital, library, school, or church. These must be secured by coöperative effort but they have a definite relation to the standard of living which each family may have. An interpretation of the value of these agencies to the family from the standpoint of its standard of living would be of much benefit. It would probably result in a greater willingness on the part of the community to support community institutions and in a more general use of the institutions on the part of rural families.

Studies of Rural Attitudes. Some years ago several rural sociologists were very much interested in the study of attitudes.⁸ The interest in this subject does not appear to be quite so general at the present time but the problem remains. The lack of satisfactory techniques for studying attitudes has been the deterrent factor, for certainly the advisability of knowing more about the attitudes of rural people is unquestioned. The method of interviewing persons for the purpose of discovering attitudes as well as the method of asking specific questions directly have been used recently with en-

⁸ See, e.g., Bernard, L. L., "A Theory of Rural Attitudes," *Amer. J. Sociol.*, XX:630-649 (March, 1917).

couraging results.⁹ A more general use of these methods with the addition of improvements in technique whenever possible is warranted.

The social aspects of the personality of farmers is a subject which may well come within the field of rural sociology. Research in farm management shows fairly conclusively that of all the factors in production the human factor is the most important. It is the capacity and efficiency of the farmer who manages the farm that determines finally the degree of success attained in operating it. One proof of this statement is the fact that frequently two farmers having approximately equal resources in land and equipment will secure very different results. It is logical to attribute the difference to the personality characteristics of the two men. Therefore, a study of the characteristics associated with success or failure in farming might have a profound influence on the training of future farmers or in advising any particular person to engage in this occupation. Also such studies would be likely to contribute to a clearer understanding of personality itself.

There is a need also for a study of the various forms of art and recreation in relation to their influence on the personalities of rural people. Comparatively little attention has been given to these subjects although they have a vital relation to the contentment and progress of rural people. Many of the older forms of recreation in rural areas have disappeared and in their place commercialized forms have appeared. But commercialized recreation does not seem to suffice for the total recreational needs of an individual. More informal types which permit self-expression are essential. The point of attack in this connection from the standpoint of rural sociology consists in finding out the amount of recreation of a creative sort which is needed and the types which are likely to be most effective in producing a wholesome, well-balanced personality.

While art deals primarily with emotional expression it may be studied objectively for the purpose of finding out in what ways rural people express their emotions and whether or not these ways are adequate. Many forms of art are now influenced by urban life to such an extent that rural people have not thought sufficiently about the means of expressing in their own way the deepest expe-

⁹ Manny, T. B., *Farmers Experiences and Opinions as Factors Influencing Their Cotton Marketing Methods*, Circular 144, U. S. Dept. Agri.

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riences and ideals of their life. The effects of this limitation on the personalities of rural people is a problem that may be considered by rural sociology.

BIBLIOGRAPHY

- Gillette, J. M., *Rural Sociology*, 1928, Ch. I.
Hawthorn, H. B., *The Sociology of Rural Life*, 1926, Ch. I.
Hoffer, C. R., *Introduction to Rural Sociology*, 1930, Chs. I and XX.
———"The Status of Rural Sociology in Colleges and Universities,"
Pub. Amer. Sociol. Society, XXII:244-249 (1928).
Lundberg, Anderson, Bain, and Others, *Trends in American Sociology*,
1929, Ch. V.
President's Research Committee on Social Trends, *Recent Social Trends*,
1933, Vol. I, Ch. X.
Sanderson, Dwight, "Scientific Research in Rural Sociology," *Amer. Jl. Sociol.*, XXXIII:177-193 (Sept., 1927).
———"The Teaching of Rural Sociology," *Amer. Jl. Sociol.*, XXII:433-460 (Jan., 1917).
Sims, N. L., *Elements of Rural Sociology*, 1928, Ch. I.
Vogt, Paul L., "Rural Sociology as a College Discipline," *Pub. Amer. Sociol. Society*, XVII:190-194 (1923).

CHAPTER VII

URBAN SOCIOLOGY

THOUGH the city is very ancient—city life has a history of some 6,000 years—the spectacular rise of the city's influence has been limited to quite recent times. The unparalleled increase in the number of great cities and in the proportion of urban to rural population has been a characteristic feature of the last century. This rise of urban civilization has been the most remarkable social phenomenon of modern times, at least so far as Western Civilization is concerned. The mark of our modern civilization is the city.

It is with this phenomenon, and the problem of adjustment it presents, that Urban Sociology is concerned. Its first task is to define the city. This appears to be a simple matter. Actually it is very difficult, and so far as a clear-cut definition is concerned, seemingly impossible. The legal definition of a city as an incorporated community appears to be definite and concise, yet there is no uniformity in the legal characteristics of a city throughout the United States, and the definitions here differ from those in other countries. Moreover, the legal definition falls short in restricting urban phenomena to the area within the city limits, whereas it is a notorious fact that "cities, being the dynamic units of modern civilization, always tend to overrun and exceed fixed boundaries and limits—arbitrary devices for administrative purposes, often out of harmony with the realities of urban areas and growth."¹ Industrial, economic, and social factors, and not political boundaries, define the real city. The metropolitan area comes closer to being the true urban center or region, and must be treated as a unit in any comprehensive scheme of social planning. Political considerations stand in the way of such unified treatment, and one of the major problems of practical application is to devise a political system adjusted to the actual conditions. This is fraught with serious difficulties, since many large urban areas not only include numerous cities, towns,

¹ Anderson, Nels, and Lindeman, E. C., *Urban Sociology*, 1928, p. 46. (By permission of the publishers, Harcourt, Brace and Co., N. Y.)

and villages within the same state, but across state lines. Even smaller communities present a similar problem. Bristol, Va., and Bristol, Tenn., for example, are actually one community though arbitrarily divided by an imaginary line in the center of the main street.

The simplest and most universal definition is the statistical one by which cities are classed and compared according to population. Our Census Bureau today classifies as urban population that residing in cities and other incorporated places having 2,500 inhabitants or more. This definition actually takes in places of from 2,500 to nearly 7,00,000 population, which is too wide a spread to mean anything. Obviously cities, considered statistically, must be classified and grouped as to size, as places of 2,500 to 5,000 population, of 5,000 to 10,000, 10,000 to 25,000, 25,000 to 100,000, and so on. Indeed, one of the major problems of Urban Sociology is to discover at what point in the growth of a city various problems or other social phenomena arise and how the character of a given situation varies with the size of the community, and in particular with the density of population. For example, the term "cities" as used in Bedford's *Readings in Urban Sociology*, where such problems as city planning, public health and safety, housing, the community and neighborhood, and social adjustment are discussed, is taken to mean those centers of population having 100,000 or more inhabitants. The range above 100,000 population is very wide and needs to be differentiated, and it is not yet established that the characteristic effects of these problems are limited to the larger communities. A problem like housing may be so defined that it is present in some degree in every city. In our present state of knowledge the dividing line at 100,000 may be convenient and practical. My point is simply that we do not as yet possess sufficient data to correlate specifically types of urban phenomena with size of community, or density of population. We do not know definitely what are the earmarks of various urban communities.

The statistical definition indicates only one trait of difference. Other attempts have been made to construct a compound definition by including numerous characteristics. Thus we are told that cities are characterized by complexity, specialization, standardization, mobility, mechanization, insecurity, impersonal control, anonymity, accelerated mental activity, independence of thought, superficiality,

nervous strain and emotional excitement; they are called by some the only real centers of civilization and are likened by others to sores upon the body. Most of these are merely superficial observations. More objective and fundamental are the definitions that relate to economic and environmental factors and the conditions making possible the concentration of population within limited areas. The "compound definition" of Sorokin and Zimmerman is at bottom based upon a single trait, that of occupation, or more broadly, economic organization. Their principal criterion of rural society or population is occupational, the collection and cultivation of plants and animals. The urban world is engaged in manufacturing and mechanical pursuits, in trade, commerce, and the professions, in short, in non-agricultural occupations. The rural world is based primarily on an agricultural economy, the urban on an industrial and commercial. From this basis, there develop those urban characteristics whereby size of community, density and heterogeneity of population, differentiation and stratification, mobility and interactions are correlated positively with urbanism. This approach has much to commend it, and it accords with historical distinctions.

"The ancient city was a walled town and hence was easily distinguished from the surrounding rural districts. Similarly, in the middle ages the only places of collective residence were the enclosed towns which were absolutely cut off from the scattered population in the rest of the country. In such circumstances, there could be but one distinction between city and country. This distinction, moreover, was recognized by the law, which by royal charter conferred certain privileges upon the towns as compared with the open country. The basis of the distinction was the pursuit of industry and commerce, *i.e.*, the cities were manufacturing or market places. Hence it was that the differentiation of population into town and country came to signify a contrast between manufacturing industry and commerce on the one hand, and agriculture on the other, and this distinction was the one made by scientific writers in Germany up to the most recent times. In the eighteenth century the line between town and country was indeed a sharp one, and the opposition of their interests was clearly marked. The era of steam and machinery broke it down in England early in the present (19th) century, but on the Continent this influence has worked more slowly."²

While the distinction may be not so clear today, it is still present and is of fundamental importance. The economic or self-mainte-

² Weber, Adna F., *The Growth of Cities in the Nineteenth Century*, 1899, pp. 6-7. (By permission of the publishers, the Columbia University Press.)

nance mores are basic and the secondary mores adjust to them. The immaterial culture takes its tone from the material. At bottom, then, we have a contrast between an agricultural economy, with all that it implies, and an industrial and commercial economy, —not in the sense of absolutes but of the preponderance of one type over the other—and the modern problems in the respective fields are essentially problems of adjustment to the changed conditions produced in turn by the agricultural, commercial and industrial revolutions. Industrial and commercial activities tend by their very nature to lead to a concentration of population, which produces great complexity of social relations and calls for a highly evolved type of social organization. These are the basic characteristics of urban civilization. Population growth, technological progress and social organization are the elements underlying the growth of cities.⁸

According to another point of view, the city cannot be expressed in geographic terms; it must be defined culturally. It is a state of mind, a way of behaving, a mode of life, varying of course with size and other factors. Thus there is "the urban way of life" as opposed to the rural: the major human interests looking toward the maintenance, protection, and perpetuation of life and toward security and satisfaction in life find different expression and assume a different character under one set of life-conditions as contrasted with the other. The sum of all the adjustments to its life-conditions constitutes, on the one hand, urban civilization or culture, and on the other, rural civilization or culture.

Actually, of course, no clear-cut difference between the rural and the urban exists. There are zones of transition, not sharp lines of distinction. What is characteristically urban or rural is blurred, for urban influences penetrate rural areas and rural influences permeate urban areas. City populations have grown largely by migration from rural districts; these migrants have brought their rural mores with them. The development from village to town to city is unbroken and gradual—a growth, not a revolution. Moreover, both city and country are organic parts of present civilization and share in the national culture. With respect to certain culture traits, as for example religious attitudes or family forms, the city may be merely in the vanguard of general cultural changes. As Sorokin

⁸ Carpenter, *The Sociology of City Life*, 1931, Ch. I.

says, many differential characteristics of the rural and urban community consist not so much in the presence of certain traits in rural, and their absence in urban communities, as in a quantitative increase or decrease of these characteristics or in their positive or negative correlation with what he calls "rurality" and "urbanity."⁴

The sociology of city life, to distinguish it from other disciplines studying the city, is interested in the whole complex situation and all the interrelationships that make up urban social life. Its field is urban society, which it attempts to comprehend as a whole. It deals with not one but all aspects of the urban social universe. Special problems are or should be studied in all their bearings and ramifications, as the particular situation fits into or relates to all other aspects of social life. Urban Sociology is thus, like the broad field of sociology, a generalizing science. If general sociology is a study of social adjustment to life-conditions—how adjustments arise, are selected and adopted, and are periodically refitted to changing and changed conditions—then Urban Sociology is the study of the process of adjustment to life-conditions as they exist in the city. So far as it has a practical aim, it is to promote adjustment and exercise control as far as may be possible. Social or cultural evolution is essentially an automatic process, its course being shaped by massive impersonal forces. Man cannot alter them, but by learning about them and their mode of operation he can shape his actions accordingly and produce better adjustment to the situation. For example, by learning the laws of city growth, and adjusting to them through city planning and zoning, more order and direction can be given to the growth of the city and the distribution of utilities, and the waste and maladjustment resulting from the encroachment of one utility upon another can be avoided. This general point of view has been well expressed by Anderson and Lindeman as follows:

"Since the dawn of civilization man has been a city builder, though he has never built a perfect city or even approached an ideal one. Yet throughout his career the communities that he has established have retained a striking degree of consistency with the situations. The city that is coming to be his natural home, although man-made, is not built altogether on patterns of his choosing. While it is a measure of his

⁴ Sorokin, P. A., and Zimmerman, C. C., *Principles of Rural-Urban Sociology*, 1929, p. 14.

genius and a monument to his progress, and while he has some discretion as to minor details, he builds the kind of city the natural forces determine, the kind of city the situation permits. As cities become antiquated or inconvenient he renews them. The location of cities, the manner and direction of their growth, as well as their limits, are partly conditioned by forces beyond man's control. Topography, climate, natural resources, transportation, and other natural advantages or disadvantages are factors in deciding the nature, type, size, and arrangement of the community. These natural determinants have much to do in giving direction to the course of a community—whether it remains a hamlet, grows to be a village or a town, or develops finally into a metropolitan center.”⁵

Urban Sociology has a tremendously complex and difficult field in which to work—the most complex type of social organization, the most highly evolved type of civilization known. The ethnography of primitive societies appears by contrast as a relatively simple matter. Preliterate culture is comparatively easy to observe and describe; primitive societies are small and less diversified, and social relations are less complex. The accumulated data in the field of ethnography are very extensive. Urban Sociology has no such comparable body of demographic material. Moreover, modern society makes all too little provision for the accurate recording of events.

Urban Sociology stands in great need of perspective. It must gather more data on the history of cities and make more social historical studies of problems like city government, crime, recreation, etc. Most of its data are ultra-modern and cross-sectional. It must also learn much more about cities in other countries so as to avoid the common fallacies such as “the elevation of somewhat incidental local relationships to the rank of a universal formula; of a particular result found in one place or period into ‘a general law’; or of a highly variable and ‘unstable’ relationship into ‘a rigid uniformity.’”⁶ It is not yet established that the characteristics of the city as we know them today are really constant and not limited in time and space. “Phenomena which at the moment seem to be characteristics of urban civilization may rather represent transitional aspects of a population's adaptation to urbanism or the ini-

⁵ Anderson, Nels, and Lindeman, E. C., *Urban Sociology*, 1928, p. 42. (By permission of the publishers, Harcourt, Brace & Co., N. Y.)

⁶ Sorokin and Zimmerman, *Principles of Rural-Urban Sociology*, New York: Henry Holt & Co., Inc., 1929, p. vi.

tial stages in the evolution and diffusion of new culture traits.”⁷ While Urban Sociology is ultimately a generalizing science, it is not yet prepared to draw many generalizations. It needs more factual studies, more *Middletowns*, both American and foreign, more studies like *The Hobo*, *The Gold Coast and the Slum*, *The Ghetto*, *Delinquency Areas*, *1000 City Churches*, more city and regional surveys. Before generalization can proceed farther, a tremendous amount of factual material must be gathered.

Despite its shortcomings, Urban Sociology has the distinct advantage of having its feet on the ground. It is generally accepted that knowledge of the physical structure of the city is prerequisite to an understanding of its life and indispensable to intelligent control, suggesting what is possible and practical and what is futile in the planning and building of cities. Much knowledge has been accumulated regarding urban development as it is affected by such factors as topography, location, climate, altitude, physical barriers, natural resources and other environmental factors, the functional differentiation in the uses to which a city-occupied area is put, the changes which take place in the habitat and their social effects, and other interrelations between urban communities and their environment. The ecological approach has already contributed much to our understanding of urban social phenomena and such studies must be further prosecuted. Not only must we study mobility and the competition for space within a given city but also competition between communities and the life-cycle of cities—their origin, development, and death—if it is true that “death comes to every city as it comes to every man.”⁸ We need to investigate further such questions as the location of industry and the degree to which it continues to centralize or tends to disperse, whether congestion is inevitable in a growing city; whether there is a point in the growth of a city beyond which further growth is a detriment and not a benefit. The technological aspects of city life need to be stressed, for the environment is highly artificial and technical advances underlie the solution of many urban problems, *e.g.*, transportation and congestion. The more we can learn about the nature and composition of the population of cities the better; not only how urban

⁷ Carpenter, *The Sociology of City Life*, New York: Longmans, Green & Co., 1931, p. 248.

⁸ Keith, “The Riddle of Our Civilization,” *New York Times Magazine*, April 3, 1932.

population contrasts with rural as to age, sex-ratio, origin, proportion of individuals married, birth and death and sickness rates, etc., but also how and why cities differ among themselves in these respects, and to what extent these characteristics approach universality and constancy. Studies of the population together with those of the physical setting of city life give the most basic approach to Urban Sociology—they are concerned with the two most fundamental elements of people and habitat.

The questions of the biological productivity of urban populations and the eugenic effects of city growth have long engaged the interest of students; they still remain unsolved. Are city dwellers surviving as a population group? Is it true that "the good germ-plasm in the country has been and is rising to the top, going to the cities, and there being sterilized?"⁹ Does the sifting power of cities make them self-destructive?¹⁰ Certain questions arise in connection with such studies. Is there a confusion of biological and cultural factors? Are the tendencies that appear to be established indicative of a permanent situation or merely a transitional stage? If the city thus far has grown mainly by accretion, is that an indication that population adjustments will not later be made? Is not the situation being modified all the time through medical advance and the public health movement? May the effects of city life upon the human organism be of a short-time nature and lose their force as the population becomes more inured to it? Have we sufficient data covering a wide range and sweep of time to make generalizations?

In addition to the biological considerations involved in the inter-relationships between the city and the surrounding country, a fertile field of research is offered in the commodity and cultural exchange relationships between the city and its hinterland. A profitable range of inquiry is also presented by the study of group life in modern cities in contrast to rural areas. Into what groups is urban society divided, how are they classified, to what extent is membership interlocked, what is the basis of organization, what are their codes, to what extent are the groups restricted to the neighborhood or scattered throughout the city or beyond it? In cities of what size and under what conditions do distinctive areas

⁹ East, E. M., *Heredity and Human Affairs*, 1927, pp. 261-262.

¹⁰ Huntington, Ellsworth, *The Pulse of Progress*, 1926, Ch. IV.

like Bohemia, Hobohemia, the Gold Coast, the Bowery, immigrant colonies, Back Bay, Cicero, etc., arise? What urban social types may be defined and to what extent are they essentially peculiar to the city and not due merely to the larger number of such type individuals to be found in a large center of population? ¹¹

Another important field to be explored further is that of urban folkways or culture patterns. For example, what are the religious folkways of urban communities? To what extent are they generally shared? To what extent characteristic of special groups? Why is religion regarded, if it is, as a thing apart from the regular business of life? The situation is vastly different among primitive peoples and has been so historically. Are agnosticism and skepticism towards existing orthodoxies, as Carpenter ¹² suggests, a form of culture change which is characteristic of modern society in general rather than just the city, and one which has, up to the present, gained greater headway in the city than elsewhere? Or are they a manifestation or maladjustment to city life—due perhaps to the rapidity of transition from rural to urban conditions—which will disappear as adjustment develops? Or is the situation in this respect, as in the case of city government, marriage and the family and so forth, merely one of cultural lag, due to the fact that our religious traditions, governmental and familial forms were developed under and reflect rural conditions and have not yet changed sufficiently to fit the conditions of city life?

A great need of Urban Sociology today is to conduct more investigations into the normal aspects of city life. Urban Sociology has engaged too much in slumming. We need to emphasize the study of marriage and family life in general rather than concentrate so much on divorce and family disorganization; we need to study other patterns of behavior besides those associated with vice and immorality; we need to study other residential areas beside the slums. As Anderson and Lindeman state:

“The morbid is only one phase of urban life. The housing of the rich holds as much material for sociologists as do tenements. The flat without a bath is a sociological problem no more than the apartment with seven. Fifth Avenue shops are not less fascinating than the push-cart markets of Grand Street, New York, or Maxwell Street, Chicago.

¹¹ Anderson and Lindeman, *Op. cit.*, Ch. XII.

¹² *Op. cit.*, pp. 271-274.

Hobohemia with its leisure class, the 'won't-works' and the 'can't-works,' vies in color and interest with the streets given over to polite club life. The Gold Coast is no less a sociological fact, and no less interesting, than is Chinatown. In any case, to find out all there is to know about some particular segment of urban life and relate it to the larger life about it, is a scientific method of studying the city."¹⁸

Unless we emphasize the normal as well as the pathological we shall get a distorted view of any given situation and engage in futile efforts to make adjustments. For example, the disappearance of the neighborhood with its intimate, primary-group associations, may be a general urban phenomenon, not restricted to the slums. The neighborhood in the old sense may be entirely mal-adjusted in the city; all the forces may be tending in another direction, which will eventually produce a type or types of social contact adapted to the city. If this is so, then efforts to restore the neighborhood in the small-town or village sense are doomed to failure at the start. At least we should know what forces are at work before developing a plan for organizing the community. Again, is the zone in transition peculiar to the area surrounding the central business district or does every section of a growing city become sooner or later a transitional area? We need to discover what are city norms—what ways are adjusted to city life—otherwise our vision is distorted and city ways are judged from a rural standpoint. Much Urban Sociology is shot through with moral judgments, with the rural taken as the norm. It is lamented that primary, face-to-face relationships are giving way to secondary or impersonal relations, that anonymity is becoming more and more a characteristic of the city, that the home has been reduced in importance, that home ownership has decreased, that the neighborhood is declining in significance, that people are leaving the church, that urban types of recreation are passive and commercialized, that divorce is increasing, etc. From an objective scientific standpoint, all these trends, if true, may be adjustments to city conditions and therefore superior to their rural counterparts. Automatic forces may be selecting for extinction the rural modes and producing a situation in which impersonal relationships, abbreviated activities in the home, tenantry, groupings based on interest rather than

¹⁸ Anderson, Nels, and Lindeman, E. C., *Urban Sociology*, 1928, p. xxxii. (By permission of the publishers, Harcourt, Brace & Co., N. Y.)

residence, passive, organized and commercialized recreation, institutional churches, smaller adherence to organized religion and less permanent marital relations may constitute distinct adjustment to urban life-conditions.

Ethnocentrism has no place in science. Diverse or even offensive mores represent ways, justified by their persistence over other ways, in which men have reacted upon environment in the struggle for life and for self-realization. "Men have been in deadly earnest in this struggle and have done the best they could for themselves, dodging and twisting and turning to avoid the pain of maladjustment; they have had no idea of being perverse, but have been pre-occupied in the effort to secure greater satisfaction of tangible interests. In assessing their mores, the moral judgment is wholly out of place."¹⁴ Any firmly settled folkway or institution of society is expedient in the setting of its time, as an adaptation. If it were not, it would not be there. It will be noted that the folkway is supposed to be a settled one, that is, a tried and preserved variation, of vital import; an upstart fashion or fad is a variation upon which selection has yet to pass, and neither in organic nor in societal evolution is there any reason to look for adaptation in variations prior to selection. Nor can a fading maladjustment be regarded as firmly settled.

Transition from rural to urban life on the part of so large a proportion of the population has had the result of profoundly affecting all our institutions, beliefs, and practices; thus the student of social change finds the city a marvelous field in which to work. The modern city is an intensely interesting, readily available sociological laboratory. It gives the student direct contact with reality. It permits a ready check-up on fact and theory. It provides a type of investigation that is of immediate concern and of much applicability. It is a direct challenge to the science of society and one which Urban Sociology is willing to accept.

¹⁴ Keller, A. G., *Societal Evolution*, rev. ed., 1931, p. 329. (Reprinted with permission of the publishers, The Macmillan Co., New York City.)

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BIBLIOGRAPHY

- Anderson, Nels, *The Hobo: The Sociology of the Homeless Man*, 1923.
Anderson, Nels, and Lindeman, Eduard C., *Urban Sociology*, 1928.
Bedford, Scott E. W., *Readings in Urban Sociology*, 1927.
Carpenter, Niles, *The Sociology of City Life*, 1931.
Davie, Maurice R., *Problems of City Life*, 1932.
Douglass, H. P., *1000 City Churches*, 1926.
Howe, Frederic C., *The Modern City and Its Problems*, 1915.
Hubbard, T. and H. V., *Our Cities Today and Tomorrow*, 1929.
Keller, A. G., *Societal Evolution*, 1931.
Lynd, Robert S. and Helen M., *Middletown*, 1929.
McKenzie, R. D., *The Metropolitan Community*, 1933.
Munro, W. B., *Municipal Government and Administration*, 1923.
Park, R. E., Burgess, E. W., and McKenzie, R. D., *The City* (with a bibliography by L. Wirth), 1925.
Regional Survey of New York and Its Environs. 8 vols., 1927-1931.
Shaw, Clifford R., *Delinquency Areas*, 1929.
Sorokin, P. A. and Zimmerman, C. C., *Principles of Rural-Urban Sociology*, 1929.
Taylor, Graham R., *Satellite Cities*, 1915.
Thompson, John G., *Urbanization*, 1927.
Weber, A. F., *The Growth of Cities in the Nineteenth Century*, 1899.
Wirth, Louis, *The Ghetto*, 1928.
Zorbaugh, Harvey W., *The Gold Coast and the Slum*, 1929.

CHAPTER VIII

CULTURAL AND FOLK SOCIOLOGY

SOCIOLOGY is, among other things, the study of culture. It will not be maintained in this essay that this is exclusively the subject-matter of sociology alone, nor that this is the whole field of sociology. The contention is rather that there is work to be done here, and that the sociologist can do it.

Culture, the processes of its origin and growth, its spread and its perpetuation, is a broad field. It is dealt with at present by anthropologists, economists, political scientists, historians, and many others. But each of these deals with culture in a particular aspect: the anthropologist primarily in its primitive stages, the economist and political scientist in certain special fields, the historian in its national or local significance. There are few among them who conceive it as their duty to synthesize and generalize. It is this latter field which strikes me as being one in which sociology can do some of its best work.

I shall not argue with those who see some other field as the proper province of sociology. If there could be evolved some sign language in which social scientists could express themselves, many of the apparent disagreements would be found to be non-existent. Similarly, if social scientists, when they discuss methods, would do so, not as partisans, but impersonally and in disinterested fashion, much verbiage would be spared us. "When a scientist begins to talk a good deal about method instead of demonstrating it in practice without saying much about it, legitimate inference leads to the conclusion that he has not been working much of late or has mined out his vein."

In this chapter I shall use the term "cultural sociology" to mean the synthetic and generalizing study of folkways which has as its aim the clearer understanding of the origin, evolution, and spread of human institutions.

By "folk sociology" I shall mean the study of the folkways and culture of any particular people, whether primitive tribe, modern

immigrant group, nation, social class, or any other limited and fairly homogeneous folk.

In work that has already been done, I class as cultural sociology the bulk of the writings of Herbert Spencer, Tylor, Westermarck, Frazer, Sumner, Briffault, Case, Chapin, Hart, Keller, Ogburn, Stern, Wallis, Webster, and Willey, to name but a few. I class as folk sociology the work of Thomas and Znaniecki, Odum, Radcliffe Brown, Malinowski, Redfield, Mr. and Mrs. Lynd, and the whole group of ethnologists who see in their research more than the mere local significance of group folkways.

The Field of Folk and Cultural Sociology

It should be apparent, then, from the definitions given above that the fields of cultural and folk sociology are not identical. Without the work of the latter, the former would lack material from which generalizations could be drawn. The folk sociologist selects the group whose folkways and institutions he is to study, and by careful work *in person* and *in the field* observes as fully as he is able the whole life of his people. If it be an immigrant group in America or a native tribe in Samoa, the folk sociologist must learn the language or engage a dependable interpreter: one cannot trust to visual impressions for the real significance of the cultural life of the group. His visit must be a long one: a man may spend three months among a people and feel that he can write a book about them; let him linger for a year, and he will not be so sure of himself. The longer he remains, the more chary he becomes of making facile generalizations.

He will make his research as objective as is possible. The missionary has rarely made a good folk sociologist because his descriptions and interpretations of native or folk life are almost inevitably in terms of his own bias of religion. The reformer, likewise, is at a disadvantage in studying an immigrant block, a group of mountaineers, or a farm community: he goes at his work with the conviction that his own standards are correct, and that those of the group which conflict with his own are basically wrong.

The folk sociologist will consider the physical and geographical environment of his chosen group. Most of the basic folkways take their tone from the relative proportion of numbers to land, and

from the potentialities for livelihood in the environment itself. It will be shown later that the economic folkways are tremendously significant: therefore it is imperative that they should be studied in all their ramifications.

But no phase of the life of the group can be overlooked. Government, law and order, religion, marriage practices, family life, health, amusements, material artifacts, æsthetic achievements—all of these are important if the rounded picture of the people's life is to be known. It would be worth while to list the main headings of the Lynds' study of Middletown: getting a living, making a home (this topic includes marriage, family life, child-rearing, food, clothing, and housework), training the young, using leisure, engaging in religious practices, and engaging in community activities (this section includes government, health, caring for the unable, and group solidarity). Incidentally, the study was made by the Lynds with a group of trained assistants; it required more than a year for these experts to collect a mass of materials adequate for the purpose of their study, and another three years of reflection and criticism to prepare their report. This is true folk sociology.

Finally, the cultural, traditional, and racial backgrounds of the group must be studied. It is not enough to know that the Doukhobors in Alberta and Saskatchewan have certain distinguishing folkways. What lies back of these ways? How do the people happen to be in Canada at all? What is the long story which leads up to the arrest of three hundred Doukhobors for parading naked through the streets of a town? This background study is an immense one in itself, and demands historical research.

The field, then, of folk sociology is so large that the combined efforts of ethnographers, historians, economists, and other social scientists have merely touched the outside fringe of it. The essential qualities of mind necessary for successful work in it are the scientific spirit, patience, industry, and sympathetic sensitiveness to the group being studied. It is worth while here to explain that the scientific spirit in sociology demands the avoidance of the following pitfalls: concern over the correct method, desire for an unearthly precision of terminology, metaphysical concepts, absorption in the motives of individuals, the defense of a thesis, the tendency to reason rather than to investigate, the lure of reasoning from analogy. Folk sociology, "like other sciences, is after nothing else

than the truth; and any method of attaining to the truth which experience has shown, by verification, to be effective, provided such a method is applicable to societal phenomena, is to be drawn upon freely." In general, the sociologist runs least danger by adhering as closely as possible to the positive methods exemplified in the natural sciences.

The field of cultural sociology is a much broader and more difficult one than that of folk sociology. It is broader in that it is concerned, not with the folkways of one group, but with the folkways of human society all over the world. It strives to study, not merely the religious beliefs and practices of the Polish immigrant or the West African, but the whole institution of religion, and how these particular folkways add to the general picture or fit into it. It takes all that the economists have to tell about modern economic conditions, combines it with what the historians can offer, adds the material of the folk sociologist, particularly the ethnographer, and then strives to present a rounded account of the growth and development of the economic institution. Similarly with government, marriage, and the other social institutions.

Thus, cultural sociology is broader than folk sociology. Its field is also more difficult. The folk sociologist can still do an effective piece of work if he sees no farther than his own particular problem. His task is, in general, one of description. I am not belittling this task, for without it, science could never advance by one small step. But the cultural sociologist must be endowed with the priceless gift of creative intelligence. He must be able to rise above the facts at his disposal and view the whole of life in society. He is the master cartographer who takes the individual studies made by folk sociologists and draws as complete an outline map as is possible. He must not surmise where he lacks data; he must not use a few studies for philosophizing about what "must be" or what "ought to be." He dares not recommend to society that "something should be done" about the lie of the land at a certain point. Least of all does he assume that his own map is the final and complete one. Like any true scientist, he puts his work forth to the world with the hope that it will be useful, that it will advance further study, and that its weak spots will be so patent that they will be soon corrected.

One has but to remind himself that culture is the "sum or synthesis of mental adaptations" to grasp in its entirety the illimitable

scope of cultural sociology. Certainly one can see that to try to put up a No Trespass sign and claim this vast field for one subject would be foolhardy. There is room for all in this frontier of knowledge, particularly for the cultural sociologist who is interested in integrating the labors of his fellow-workers in other disciplines. But, like every settler on the frontier, he must be a worker: there can be no calm sitting upon a stump and reflecting and philosophizing about human life, while one's neighbors and family do all the work.

The Problems of Folk and Cultural Sociology

Since folk sociology studies particular groups, and cultural sociology is the generalizing part of the science, it is apparent that the main problems yet to be solved lie in this latter field. The only problem of the former is to continue its independent research, adding continually to the store of available knowledge of particular cultures and folkways. The folk sociologist will not forget to consult the general outline map of the social institutions, for only in this way can he acquire perspective, and see the value of what he is accomplishing. What most concerns him is to catch the existing folk-groups before they disappear entirely by assimilation.

But the problems to be solved in the realm of cultural sociology are legion. Let me suggest first of all the points on which there is general agreement, for by elimination the field can be clarified. These points of agreement are:

1. Cultural behavior is socially rather than biologically determined; it is acquired, not innate; habitual in character rather than instinctive.
2. Culture is super-individual: what differentiates the folkway from the individual habit is that the former is a product of life in society.
3. But society, however essential, is insufficient in itself to explain culture. Added to it are man's capacity for forming habits, his intelligence, and language. These four together raise human behavior from the organic to the super-organic, from the physical to the cultural.
4. The interrelation between culture-traits (or folkways), and the

strain toward consistency among them, must be taken into consideration in the investigation of social phenomena.

5. The "culture setting"—the whole physiographic, social, and psychological background—must be studied before making generalizations about cultural phenomena.

6. The economic folkways are the basic ones in any culture. Change in the other folkways follows after change in the economic folkways, and is conditioned by this change. The economic ways in turn rest primarily upon the ratio of men to land, of mouths to food. To miss this fundamental point is to sow discord whenever a change is wanted in the folkways.

7. Culture is dynamic: it is continually in evolution, with the secondary folkways (religion, marriage, and the others) lagging behind the primary (economic) ways. But at any given time a society tries to enforce conformity to its ways. Imitation and inculcation are the chief means of transmitting folkways from one generation to another and from one group to another.

These are a few of the major points on which there is substantial agreement among cultural sociologists. What, then, are the problems yet to be solved? It is not my intention here to profess to lay out new problems. Most of them are already being worked on. As each one is solved, or partially answered, new ones will arise to take its place. But in listing the crucial subjects of research, one may acquire a more lucid idea of the scope of sociology:

1. The specific qualitative differences—not the "superiority or inferiority"—of races and national groups. The understanding of these differences in their true light may lead to less ethnocentrism and passionate distrust.

2. The extent to which culture-traits (folkways) are passed on by diffusion from one group to another as contrasted with the extent of independent origin. The manner of diffusion is even more important: what aids and what hinders it?

3. The stability of culture; the causes of conformity to the folkways within a given society; the effect of uniformity of culture; the influence of individuals upon culture. These interrelated problems would reveal the static and dynamic parts of our institutions, together with the reasons for each condition; they would show the "cultural lag" of institutions; and most particularly, they would indicate the part that the Great Man plays, either in moulding pub-

lic opinion and leading it into new channels, or in being himself the greatest slave to it.

4. The extent to which multiple groups and loyalties exist within a given area; determination of interrelations of these groups, and the folkways common to them. One man may be not only a citizen of his town and state and nation, but a member of the church, of a lodge, of a club, and of any number of other small organizations; each of these exerts an influence upon him toward a certain kind of action, and the resultant adjustments are frequently difficult ones to make. All the more important is it, therefore, to know in how many respects society, the church, and the other groups, are pulling in the same direction, and in how many in opposite ways.

5. In assimilation of social groups, the determination of what folkways of the old are kept and what ones of the new are adopted, and in each case why? What new problems are created by the process of assimilation or attempted assimilation? This is particularly important, not only in connection with America's assimilation of immigrants, but with other groups such as mountaineers who are for the first time coming into contact with the machine age, or country people who are trying to adjust themselves to city life.

6. The factors which in any society determine the status of women. Is the position of women due to the biological differences from men, or to traditional folkways, or to a combination of the two? And if to a combination, then to what extent is each at work?

7. The discovery of connections and transitional forms between one stage of cultural life and the stage next above it in point of complexity.

8. The extent to which maladjustment and dissent from the common folkways can exist without causing the disintegration of the society or the elimination of the maladjusted. The first part of this problem naturally would concern history and ethnology, and the latter modern society.

9. The interdependence of all the folkways, not only in civilized groups but in simple societies. Has change in one set of ways ever failed to produce sympathetic changes in the others?

10. The continual pushing back of the borders of knowledge so that the essential framework of the basic social institutions may be

discovered. What is the real core of religion? of government? of private property?

I have purposely left these problems in their vaguest and most comprehensive form: to amplify or delimit the component parts of each one would require many pages. The method of attack on these and other problems is the topic treated in the corresponding chapter of Part II of this volume.

I am quite aware of the criticisms directed against folk and cultural sociology. Becker says that "the delusions of grandeur once characteristic of sociologists have seized upon the cultural sociologists." Abel roundly affirms that "a cultural sociology is not possible," and Dawson speaks of "the wilderness of 'cultural sociology.'" But the essential reason, as I see it, for all these criticisms is that the critics want sociology to concern itself with a field which is undisputedly theirs and theirs alone. And so they bring their best logical equipment into play, and from their reflective thinking in arm-chairs produce a carefully delimited field in which sociologists can play in their neat Sunday clothes, away from the rabble of anthropologists and other social scientists who are in workaday attire and are grubbing in the field for facts. May they have peace in their holy preserve! The rest of sociology, which is by them politely labelled as an *omnium gatherum*, a science of organized smatter, an investigation of left-overs, a field occupied by squatter's title—the rest of sociology, I say, must keep at work. The calling of names never hurt a scientist who was heart and soul determined to discover new truths.

Sociology, in fine, is compelled to concentrate its attention upon *society*. The individual cannot be treated as an isolated unit; he must be studied in his social setting. The question may, of course, be raised as to whether there can be discovered a vital relation between social data and the form and expression of individual life, that is, whether any generally valid laws exist that govern the life of society. As Boas points out, a scientific inquiry "is concerned only with the interrelations between the observed phenomena, in the same way as physics and chemistry are interested in the forms of equilibrium and movement of matter, as they appear to our senses. The question of the usefulness of the knowledge gained is entirely irrelevant. The interest of the physicist and chemist centers in the

development of a complete understanding of the intricacies of the outer world. A discovery has value only from the point of view of shedding new light upon the general problems of these sciences. The applicability of experience to technical problems does not concern the physicist. What may be of greatest value in our practical life does not need to be of any interest to him, and what is of no value in our daily occupations may to him be of fundamental value. The only valuation of discoveries that can be admitted by pure science is their significance in the solution of general abstract problems."

This standpoint of pure science can also be that of social science. But it is patent that social phenomena concern our own selves much more immediately, for almost every sociological problem touches our most intimate life. Folk and cultural sociology, with their broad scope, offer endless opportunity. If for the present they seem a bit removed from application to every-day life, this may be only because we are concerned with building our foundations securely before we erect our superstructures.

BIBLIOGRAPHY

- Abel, Theodore, "Is A Cultural Sociology Possible?" *Amer. Jl. Sociol.*, XXXV:739-752 (March, 1930).
- Bernard, L. L., "The Interdependence of Factors Basic to the Evolution of Culture," *Amer. Jl. Sociol.*, XXXII:177-205 (Sept., 1926).
- Boas, Franz, *Anthropology and Modern Life*, rev. ed., 1932.
- Keller, A. G., *Societal Evolution*, rev. ed., 1931.
- Lynd, Robert S. and Helen M., *Middletown, a Study in Contemporary American Culture*, 1929.
- Murdock, G. P., "The Science of Culture," *Amer. Anthropologist*, XXXIV:200-215 (April-June, 1932).
- Odum, Howard W., "Folk and Regional Conflict as a Field of Sociological Study," *Pub. Amer. Sociol. Society*, XXV:1-17 (May, 1931).
- "Notes on the Study of Regional and Folk Society," *Social Forces*, X:164-175 (Dec., 1931).
- Redfield, Robert, *Tepoztlán, a Mexican Village*, 1930.
- Sumner, W. G., *Folkways*, 1906.
- Sumner, W. G. and Keller, A. G., *The Science of Society*, 4 vols., 1927.
- Thomas, W. I., "The Scope and Method of Folk Sociology," *Amer. Jl. Sociol.*, I:434-445 (Jan., 1896).
- von Wiese, Leopold and Becker, Howard, *Systematic Sociology*, 1932.

CHAPTER IX

SOCIAL PSYCHOLOGY

I.

IN ATTEMPTING to determine the field of social psychology, well-known treatises on the subject have been examined and the major topics classified. Twenty-eight volumes that have been published in recent years and that are now in use in American colleges and universities have been considered.¹ The major topics as indicated by chapter headings in each of the twenty-eight books have been classified. Some latitude was used in reducing these topics to common denominators.² The results are given in Table I. This classification is somewhat arbitrary, due in part to the fact that dif-

I. Fields of Social Psychology

1. Culture Trait Interaction
2. Crowd and Group Action
3. Suggestion-Response Phenomena
4. Social Controls and Social Control
5. Instinctive Tendencies and Wishes
6. Personality Integration and Behavior

¹ The choice of these books was made on the basis, first, of statements in current college and university bulletins, and second, of announcements of leading publishing houses. The following list was used (Author's name and publisher in each instance): Allport (Houghton Mifflin), Bernard (Holt), Bogardus (Century), Cooley (three volumes, Scribners), Dewey (two volumes, Holt), Dunlap (Williams & Wilkins), Ellwood (Appleton), Ewer (Macmillan), Folsom (Harper), Gault (Holt), Ginsberg (Dutton), Kantor (Follett), Krueger and Reckless (Longmans, Green), McDougall (Luce), Mukerjee and Sen-Gupta (Heath), Murphy (Harper), Ross (two volumes, Macmillan), Sprowls (Williams & Wilkins), Thomas (two volumes, Knopf), Williams (Knopf), Young, K. (two volumes, Knopf), Znaniecki (Univ. of Chicago Press).

² A further problem would be to weight the topics according to amount of space given each. Another problem would be to treat each topic in terms of the number of volumes in which it is given space. Still another exercise would be to plot each topic in relation to its date of advent in the volumes considered and of the length of time that it has received major attention by one or more authors. In this way it would be possible to obtain a picture of the fields of social psychology in terms both of temporal origin and of extension.

ferent authors use similar terms in a variety of senses. The order of the arrangement in Table I is partly chronological, giving the fields first which were staked out earliest. Interestingly enough, "culture trait interaction" not only received attention before any of the other fields but it is among the foremost today. "Crowd and group action" has lapsed somewhat in recent years.. "Suggestion-response phenomena" are prominent at the present time, particularly from the response angle; similarly, "social controls and control,"—from the standpoint of controls. "Instinctive tendencies and wishes" and "personality behavior" are at one and the same time the oldest and newest fields of social psychology.

1. Culture trait interaction together with the psychical nature of culture traits has had continuous attention for decades—from Lazarus and Steinthal (about 1860), to Wundt (about 1900), to Thomas (about 1904), to the present, as evidenced in J. K. Folsom's volume published in 1931.³ Differences in language, in myth, in religion, in art, and so on, possess psychical mysteries that are still baffling. The psychical variations implied in different culture systems, the persistences in each system, the changes in each are all as live problems as ever. Following the vigorous lead taken by Wundt, social psychology views languages, myths, ideas, laws and social organization as "mental products" of community life and instigates pertinent investigations.

A closely related definition of this field was made in 1904 by W. I. Thomas in his paper on "The Province of Social Psychology," in which he asserted that social psychology examines "the crises or incidents in group life which interrupt the flow of habit and give rise to changed conditions of consciousness and practice."⁴ The study of social crises, of new inventions, of stimuli arising out of ecological changes, of the combined effects of all these factors on culture changes, represents an important sector of social psychology.

As the objective counterparts of subjective attitudes and as indices of social values culture patterns are interesting social psychological data. Personal and social conflicts arising out of the juxtaposition of different culture patterns comprise another phase of this same social psychological field.

³ Folsom, J. K., *Social Psychology*, 1931.

⁴ *Amer. Jl. Sociol.*, X:446.

2. Crowd and group phenomena comprise another of the earliest fields of social psychology to be staked out. Turbulent groups such as crowds and mobs are dramatic subjects for study, for they reveal human nature in its frankest, rawest, most native expressions. In them all the veneer of propriety, the manners, the polish of human nature are cast aside, and elemental social forces are disclosed for examination in their most drastic and dynamic moments. Human feelings and emotions attain their most objective levels in crowd and mob exhibitions, and hence, are excellent specimens for diagnosis.

The field of crowd psychology received a new emphasis during and immediately after the World War, when attention was centered on group morale, on patriotism, on national and international loyalties. E. A. Ross has given to the term, the public, a rich connotation, and stamped it as an inviting subject.⁵ Closely related is the theme of public opinion, which is rising from the rank of a sub-field to a major field of social psychology. C. H. Cooley brought the importance of "primary groups" to the fore as a vital phase of social psychology, showing how a person develops in large part out of the ideals, ideas, and reactions of his associates.⁶ Pathfinder delineations of urban group life are found in an important series of concrete studies dealing with the gang,⁷ the ghetto,⁸ the strike,⁹ the Gold Coast and slum,¹⁰ Russian Town.¹¹

By some writers the study of the group mind would be included at this point. William McDougall and others have made serious attempts at explaining group mind, but the results for the most part have hardly been comparable to the ability devoted to them.¹²

These first-mentioned fields of social psychology fit together well. Culture trait interaction is a natural supplement to crowd and group action: for the first deals with mental products; the second, with mental currents.

3. Immediately the field of suggestion-response and similar inter-

⁵ See Ross, E. A., *Social Psychology*, 1908, pp. 63-65, 346-48.

⁶ See the re-definition of "primary groups" by Ellsworth Faris, in *Amer. J. Sociol.*, XXXVIII:41-50 (July, 1932).

⁷ Thrasher, Frederick, *The Gang*, 1927.

⁸ Wirth, Louis, *The Ghetto*, 1928.

⁹ Hiller, E. T., *The Strike*, 1928.

¹⁰ Zorbaugh, Harvey W., *The Gold Coast and the Slum*, 1929.

¹¹ Young, Pauline V., *The Pilgrims of Russian Town*, 1932.

¹² McDougall, William, *The Group Mind*, 1920.

action phenomena may next be considered, for social psychology seeks "to understand and account for those uniformities in feeling, belief or volition—and hence in action—which are due to the interactions of human beings, *i.e.*, to social causes."¹³ On the one hand there is what has been called fashion-imitation,¹⁴ with all of its dominating control over both the suspecting and unsuspecting.¹⁵ Custom and conventionality imitation, or perhaps suggestion, likewise wields a powerful social influence, tying millions down to a routine and helpless observance of time-worn and often outworn behavior patterns. Sprightly, vacillating fashion activities coupled with staid custom behavior is a comprehensive area to study.

Although "imitation" as a phase of social psychology has been analyzed into its constituent processes, these sub-processes are themselves subject to further study. They include (1) merely a setting off or releasing of behavior patterns already developed; (2) an accentuation and development of behavior patterns already in operation, and (3) a building up of entirely new behavior patterns.¹⁶

The nature of suggestion is being explained today partly in terms of "conditioning." Behind conditioning is the stimulus-response formula. An extreme behaviorism which would carry social psychology off into the limbo of automatons and robots, has given way to a modified behaviorism with its emphasis on innumerable, inscrutable mechanisms.

A response when often repeated becomes a fixed behavior pattern, or habit. All the products of suggestion and conditioning and nearly all of personality may be called habit, according to Dewey.¹⁷ Integrated habits evidently constitute a very significant phase of personality.

"Attitude" is the accepted label for another large group of often repeated responses. Attitudes, as established tendencies to action,¹⁸ are potentially dynamic centers of personality. The fundamental

¹³ Ross, E. A., *Social Psychology*, 1908, p. 1.

¹⁴ *Ibid.*, Ch. VI.

¹⁵ Only this past summer I heard a member of the English Parliament in addressing his colleagues, declare that a mere change in the hairdress in England means an annual increase in business of twenty million pounds. No wonder fashion suggestion has become a business.

¹⁶ Allport, F. H., *Social Psychology*, 1924, pp. 239-42.

¹⁷ Dewey, John, *Human Nature and Conduct*, 1922.

¹⁸ Thomas, W. I., and Znaniecki, Florian, *The Polish Peasant in Europe and America*, 1927, I:21-26.

rôle of attitudes in social life has only recently achieved widespread attention.¹⁹

Suggestion-response phenomena run the gamut of interaction and of its products; they include more or less isolated responses, habits, attitudes, and other conditioned factors. They dovetail in well with both culture trait interaction and crowd and group action, for all find their dynamics of behavior largely in stimuli arising externally to the human subject.

4. Social control in general and social controls in particular represent another important section of social psychology. The grounds of control, the means of control, and the system of control constitute major approaches.²⁰ The general field of social control includes the question of social values, for the nature of control depends on the values that are to be fought for and conserved. It also involves the problem of personal responsibility, because the greater the personal responsibility for social welfare, the less the need for control, other things being equal. If persons were far more socially responsible (and socially wiser) than they now are, the problem of social control would be far different from what it is now. In answer to the question, How far do ethical considerations enter into the "social control" field? a divided answer is given. William McDougall offers an affirmative answer as follows: "The fundamental problem of social psychology is the moralization of the individual by the society into which he is born as a creature in which the non-moral and purely egoistic tendencies are so much stronger than any altruistic tendencies."²¹ Moreover, Professor McDougall insists at this point on the character phases of social psychology.²² C. A. Ellwood has contended that ethical values cannot be omitted from the scope of social psychology. He has given a humanistic interpretation of group life, a large place to motivation, and a special emphasis to personal responsibility.²³

¹⁹ For a sample survey of attitudes, see Katz, Daniel, and Allport, Floyd H., *Students' Attitudes*, 1931. For a composite picture of attitudes see Young, Kimball, ed., *Social Attitudes*, 1931.

²⁰ As early developed by E. A. Ross, *Social Control*, 1901. More recently the means of social control have been considerably elaborated and illustrated by Frederick E. Lumley, *The Means of Social Control*, 1925.

²¹ *An Introduction to Social Psychology* (Luce, Boston, 1914), p. 18.

²² *Character and Conduct of Life*, 1927.

²³ Ellwood, C. A., *The Psychology of Human Society*, 1925, Chs. XIII, XVI.

Breaking control up into its elements, L. L. Bernard has focussed attention on "controls."²⁴ He has thereby shifted the emphasis from rules and regulations to stimuli. Every stimulus to which a person responds, thus, becomes a control. Social controls become as omnipresent as stimuli. They impinge upon a person both directly and indirectly as well as continuously during his waking hours. A behavioristic setting for the operation of controls removes their analysis from considerations of personal responsibility and of ethics "by placing the emphasis in social psychology upon the discovery of the mechanisms." From control to controls is thus an elongated field ranging from formal law and obligations to informal stimulus, and from immediate ethical responsibility to "behavioristic bases of responsibility," as stated by L. L. Bernard. This field, like the three aforementioned ones, looks pretty largely to the realms outside of the person for the guiding sources of his development. We may now turn in another direction.

5. A fifth field of social psychology includes the inherited and internal sources of action. This interpretation, as originally presented by Professor McDougall, contends that the mainsprings of human action are to be found in several well-defined instincts and their accompanying emotions. These inborn tendencies are the driving and dominating forces in social life.²⁵ While instincts as specific and ready-made entities are more or less discredited today, yet the inherited and "instinctive" bases of human nature (under one name or another) rank high. The very fact, as discovered by L. L. Bernard, that there were several hundred different senses in which the term, instinct, is used by writers in the English language alone,²⁶ is at once a deathblow to the practical value of the term and testimony that there must be something very significant to a phenomenon that can carry so many different meanings.

Although Allport substituted "prepotent reflexes"²⁷ for instincts, he shifted the analysis but not the field of study. While his prepotent reflexes are innate drives, they are not as fixed, as complicated, or as ready-made as instincts. Their rôle as centers of energy and

²⁴ Bernard, L. L., *An Introduction to Social Psychology*, 1926, Chs. XXXV, XXXVI.

²⁵ McDougall, William, *Introduction to Social Psychology*, Chs. II, III.

²⁶ Bernard, L. L., *Instinct: A Study in Social Psychology*, 1924.

²⁷ *Social Psychology*, 1924, Ch. III.

the ways in which they are "set off" and developed, makes them important data for study.

The "four wishes" of W. I. Thomas²⁸ refer to the same field but in a quite different light. While the basic wishes for security, new experience, response, and recognition, are now given less prominence than they received a few years ago, they are symbols for social forces that cannot be ignored. Along with these may be added a fifth wish, to aid,²⁹ which connotes a fruitful force to be studied, for it may underlie a great deal of the disinterested behavior expended by persons in behalf of other persons.

Even if we substitute L. L. Bernard's "integrated protoplasmic systems and patterns"³⁰ for instincts, prepotent reflexes, or wishes, we refer to the same field. We cannot get away from inherited tendencies to action. Moreover, this field borders on that of the environmentally-made habits and attitudes already described. Thus, heredity and environment meet in social psychology.

6. Perhaps the most popular field of social psychology at the present time is "personality integration and behavior." L. L. Bernard has recently used the term "adjustment behavior" effectively. He now defines social psychology as the study of adjustment behavior in social situations.³¹ One of the more recent social psychologies is devoted almost entirely to personality factors, such as attitudes, wishes, language, and imagination.³² Another, likewise, devotes much space to personality topics, such as individual behavior, personality and group behavior, personality and subjective patterns—four parts out of a total of five.³³ Two of the four parts of the present writer's *Fundamentals* deal with personality traits including leadership.³⁴

It was C. H. Cooley, who by methods of participant observation, as early as 1902, defined human nature in a way that forecast current emphases when he showed how the self and society are twin-born

²⁸ Thomas, W. I., and Znaniecki, Florian, *The Polish Peasant in Europe and America*, 1927, 1:73.

²⁹ Bogardus, E. S., *Fundamentals of Social Psychology*, 1931, p. 26.

³⁰ Bernard, L. L., *An Introduction to Social Psychology*, 1926, Chs. V, VII-IX.

³¹ "Social Psychology Studies Adjustment Behavior," *Amer. J. Sociol.*, XXXVIII: 1-9 (July, 1932).

³² Krueger, E. T., and Reckless, Walter C., *Social Psychology*, 1931.

³³ Young, Kimball, *Social Psychology*, 1930.

³⁴ *Fundamentals of Social Psychology*, 1931.

and twin-developed.³⁵ J. Mark Baldwin had already defined personality in terms of the ego and the alter. More recently G. H. Mead set forth the limits of personality when he pointed out the nature of social consciousness and of meaning in the life of the individual.³⁶

With current re-definitions of personality behavior, special concepts have come to the front. "Status" now ranks as one of the most significant personality concepts,³⁷ for it explains not only what makes life interesting, but also how group recognition and evaluation function. "Life histories," as originated by W. I. Thomas and carried forward by R. E. Park, give prominence to the vibrant tensions, the hopes and defeats, the depressions and sublimations of all the persons who figure in conflict situations. The "configuration of personality" is also highly important, for the organization of personality at any moment determines its response to stimuli.³⁸

"Social situations" give the setting in which individuals become persons.³⁹ As the objective creators of personalities, they rank high in social psychology.

II.

I. The most important set of problems in social psychology arises out of the six fields (and other fields) already cited. More accurate data, better defined concepts, and intensive research is needed in each field. The need for objective studies and for experimental research is urgent and limitless. Experimental social psychology⁴⁰ proceeds slowly because social situations cannot be isolated and controlled without the danger of making them unreal. Moreover, if the subjective phases of life are ruled out of social psychological studies, then social psychology must omit some of the most important phases of its field; if it includes the subjective then it is open to

³⁵ Cooley, C. H., *Human Nature and the Social Order*, 1902.

³⁶ Mead, G. H., "Social Consciousness and the Consciousness of Meaning," *Psychological Bulletin*, VII:405.

³⁷ Suggested and developed by R. E. Park.

³⁸ Thomas, W. I., "The Configurations of Personality," in *The Unconscious*, 1927, Ch. VI.

³⁹ For definition of a "social situation" see Thomas and Znaniecki, *The Polish Peasant in Europe and America*, I:68, II:1847-49; and for explanation of how situations create persons, see Burgess, E. W., "The Study of the Delinquent as a Person," *Amer. J. Sociol.*, XXVIII:657-680 (1922).

⁴⁰ An excellent start has been made in bringing together the reports on recent experimental social psychology from the psychologist's point of view. See Murphy, Gardner and Lois B., *Experimental Social Psychology*, 1931.

the criticism of being unscientific. To get the subjective, such as attitudes, out into the open where they can be treated objectively is the outstanding problem. Experimental work on the measurement of attitudes as conducted by such investigators as L. L. Thurstone and E. J. Chave⁴¹ or on surveying student attitudes as done by Katz and Allport⁴² needs to be carried forward all along the social psychological front.

2. To formulate laws in social psychology is another far-reaching task. If its ability to arrive at laws is a measure of a science, then social psychology is hardly yet a science. Since Florian Znaniecki's bold attempt to propose certain laws (1924),⁴³ very little has been done either by way of testing his work or of proposing other laws. Thus far social psychology has produced little of predictive value; it doubtless will have to wait for the better research techniques indicated in the preceding sections of this paper.

3. To get a unity of interpretation concerning the field of social psychology is another urgent problem. With social psychologists defining their field in different ways, the student of the subject becomes bewildered, and the representatives of the other disciplines view social psychology without proper respect.

The writing of a history of social psychology goes a long ways in bringing the various interpretations into a proper perspective, especially with reference to each other. F. B. Karpf has set forth with dispassionate skill the various schools of thought and thereby laid the foundations for a new unity in social psychology that will push the discipline ahead into its rightful position among the social sciences.⁴⁴

The achievement of this organic unity is made especially difficult because at present social psychology has two different sets of parents. Both claim the parentage with a bull-dog tenacity. Neither the psychologists nor the sociologists seem inclined to release their claim. The title of our discipline favors the psychologists. The sociologists cannot suggest a more appropriate label. "Psychological Sociology" and "Psycho-sociology" are both awkward, and other titles are more awkward. Beginning with E. A. Ross, the sociolo-

⁴¹ Thurstone, L. L., *The Measurement of Attitude*, 1929.

⁴² *Op cit.*, *supra*.

⁴³ Znaniecki, Florian, *The Laws of Social Psychology*, 1925. *Social Laws*, 1899, by Gabriel Tarde was another pioneer work in this field.

⁴⁴ Karpf, Fay B., *American Social Psychology*, 1932.

gists have been producing works and teaching courses under the title of social psychology so extensively that they apparently are not now going to relinquish the title.

4. Another problem in social psychology is found in the contradictions in its psychological foundations. This dilemma is likely to continue until the various psychological schools, such as the functional, the instinctivistic, the behavioristic arrive at some agreement. How far, for instance, shall social psychology accept behaviorism? Personality and adjustment-behavior as the product of social interaction and of previous configuration of personality is almost certain to receive increasing attention. Likewise, experimental studies of objectively observable adjustment-behavior will flourish.

BIBLIOGRAPHY

- Allport, F. H., "The Psychological Bases of Social Science," *Psych. Bull.*, XXII:561-574 (Oct., 1925).
- Bernard, L. L., "Social Psychology in the United States," *Sociologus*, VIII:257-280 (Sept., 1932).
- "Recent Trends in Social Psychology," *Jl. Social Forces*, II:737-743 (Sept., 1924).
- "Social Psychology," *Encyclopædia of the Social Sciences*, 1934.
- Cobb, J. C., "The Relations of Psychology and Social Science," *Ibid.*, X:199-204 (Dec., 1931).
- Ellwood, C. A., "The Relations of Sociology and Social Psychology," *Jl. Abnormal Psych. and Social Psych.*, XXIX:3-12 (1924).
- "Social Psychology and the Social Sciences," *Psych. Bull.*, XVIII:203-220 (Apr., 1921).
- Goldenweiser, A. A., "Psychology and Culture," *Pub. Amer. Sociol. Society*, XIX:15-23 (1924).
- Karpf, Fay B., *American Social Psychology*, 1932.
- Leuba, J. H., "Sociology and Psychology," *Amer. Jl. Sociol.*, XIX:323-342 (Nov., 1913).
- Lowie, R. H., "Psychology and Sociology," *Ibid.*, XXI:217-229 (Sept., 1915).
- Ogburn, W. F., and Goldenweiser, A. A., eds., *The Social Sciences and Their Interrelations*, 1927, Ch. XXVIII.
- Rivers, W. H. R., "Sociology and Psychology," *Sociol. Rev.*, IX:1-13 (Autumn, 1916).
- Thomas, W. I., "The Province of Social Psychology," *Amer. Jl. Sociol.*, X:446-455 (Jan., 1905).
- See also the leading text books in Social Psychology.

CHAPTER X

SOCIAL PSYCHIATRY

Introduction

THE field of social psychiatry embraces all abnormal forms of social adjustments, made by individuals and certain groups as well. In the case of the individual the abnormal adjustment may be due subjectively to either functional or organic disturbances, or to both. Objectively the cause of the maladjustment is to be found in the environment. Functional disorders are related to social situations, and consequently to a functional definition of the self in relation to some situation. Even organic disturbances have a social psychological significance, since they are experiences to which the subject must make attitudinal adjustments. Furthermore, these biological conditions are given social definition in a life situation and in this way become important factors in the mental functions of the individual.

The field of social psychiatry differs from the field of social psychology in one important respect. It is interested in abnormal manifestations of behavior, while social psychology concerns itself with all social adjustments, either normal or abnormal. Both are occupied with the study of the interactions of the biological and social processes whereby the individual and society become two aspects of a total situation. This interaction may result in either normal or abnormal adjustments.

Like social psychology, social psychiatry is a division of sociology. It may be a section in psychology and medicine also, but we are interested here in its place in sociology. Social psychiatry concerns itself with problem cases arising in social situations, such as the school, with its student-teacher relations; the family, with its desertion, separation and divorce, and unadjusted parent-child relationships; industry, where unemployment, industrial disease and employer-employee conflicts give rise to emotional distortions among the workers; the courts, where emotional dislocation has led to de-

linquency or vice; and many other social institutions and social relations. These emotional distortions of personality which are the symptoms of maladjusted persons are always traceable to some conflict between the individual personality and his social situation. Wherever, in fact, we find such abnormal adjustments as delinquency, crime, vice, alcoholism, drug addiction, pauperism, poverty, corruption, abnormal sexualism, contrasuggestibility, stuttering, a suicidal tendency, or other psychoneurotic patterns of behavior in the individual, we may expect also to find a distorted social situation to which the individual was not able to adjust normally. Human behavior in all its forms is always the result of the interaction of individuals and their social environments.¹

The Nature of Human Nature

Psychiatrists realized very early that it was absolutely essential to understand human nature if they were to relate social maladjustments to a therapeutic program. It is not surprising, therefore, that most social psychiatrists as well as social psychologists have spent a great deal of their time in a dialectic conflict on the character of human nature, especially in its abnormal manifestations. In its early development psychiatry was quite largely dominated by medical men who had an anatomical bent and a somatic approach, with a strong interest in clinical observations and experimentation.² Professor Pierre Janet of the French School was one of the first to see the importance of functional disorders; his emphasis was placed on "psychic forces" and "tendencies."³ The European School of Psychoanalysts⁴ explained human nature through the repression and accumulation of submerged complexes that create "the unconscious." Everyone who has entered the field of social psychiatry has done so with some preconception of the nature of human nature as a frame of reference for his theories of social maladjustment.

Social psychology makes its contribution to social psychiatry through its explanation of human nature. Apparently the individual does not possess human nature at birth nor does he have a

¹ See Bernard, L. L., *An Introduction to Social Psychology*, 1926, Chs. VI-VII.

² In Germany Kraepelin, Wernicke, Griesinger, and Krafft-Ebing were pioneers.

³ See Janet, P., *Principles of Psychotherapy*, 1924.

⁴ Freud, Jung, Adler, in particular.

world in which to live. Both are achieved through experience in social situations where meaningless objects are defined and attitudes created concerning them. There is nothing in the biological processes that predetermine the definitions the individual will give objects and situations.

The individual begins the process of developing human nature and acquiring his world by meeting situations first of all with reflex, random and emotional behavior. Out of this early behavior develop other adjustment mechanisms: habitual behavior, imagination, reasoning and rationalization. The native capacity for developing human nature is so undefined that every individual runs the chance of an abnormal life organization. He can create attitudes of any kind as he defines the objects of the world he is slowly invading. All individuals may become potential neurotics, psychotics or psychopaths as a result of their early learned adjustments. Likewise, all individuals, excluding mental defectives, have the possibility of making socially acceptable adjustments, if their experiences lead in that direction. However, there is a chance for the development of obsessions, fears, illusions, anxieties, and all forms of distorted thinking in a life systematization of habits and attitudes.

One of the most important objects that the individual has to define and acquire in his world is his own "self." He sees himself in a configuration of many relationships and develops fixed ideas concerning his status and rôle in his social milieu. The way he defines himself in relation to others and their attitudes determines in no small way the type of adjustment he will make. If he sees himself as a part of a situation in which he is maladjusted, there is likely to be some type of compensatory accommodation that leads to a satisfactory adjustment or insulates the subject from reality through a psychosis, a neurosis or some other pathological adjustment.

Human nature and the world acquired are inextricably interrelated, no matter what may be the character of the human nature, whether it is normal or abnormal. An adjustment is always to a situation, through the interaction of the biological and social processes. It is important, therefore, to know how the individual learns to meet situations from birth on, since it is here that the emotional behavior which is important for social psychiatry develops. We need pay little attention to reflex behavior since it functions at first

to give "some sort of stability to the behavior of the organism,"⁵ in a world to which the child is not adjusted through habit formation. Random behavior is more important, since it serves as the chief basis for the formation of early habits. The organism is a bundle of unintegrated activities that can be coördinated in such a way as to result in functional adjustments that may be regarded as normal or abnormal. The newborn infant lacks a sufficient number of ready-made, definite behavior patterns for adequate adjustments to its environments, so it reacts to new stimuli with random and emotional behavior. Adults meet strange situations in the same manner, as well as when old behavior patterns have been blocked. In many cases emotional behavior is habitually substituted for normal adjustment behavior. It is possible for an individual so to organize and develop his emotional life that most of his reactions are on an emotional basis; such a person is considered emotionally unstable, neurotic or psychotic. In such cases of habitual emotional distortions, objects, experiences, situations and ideas may be defined in a way quite contrary to that in which they are understood by others, so that fears, obsessions, anxieties or other abnormal emotional reactions may develop.

Individuals have to make adjustments to many situations to which they have not been previously habituated. If these adjustments have to be made in crisis situations and under strong physical or moral compulsion the emotional life of the individual has to bear the burden. Wars, famines, disasters, riots, and some religious revivals present such crises. The shell-shock victims of the World War have attracted considerable attention. At first they were considered malingerers because no organic trouble could be found and specialists were still structuralists in their opinions. Behavior specialists, in many cases, abandoned the use of the designation "shell-shock" since many of the victims were never under fire. Furthermore, their symptoms did not differ greatly from those of the psychoneuroses in everyday life; the only difference was that the delusional attitudes involved war experiences. The psychoneurosis was brought on when individuals were called upon to meet crisis situations for which they were ill-prepared from the standpoint of the organization of their emotional lives. Thousands of them had been chronic worriers before the war; others had never

⁵ Bernard, L. L., *op. cit.*, 113.

faced a crucial experience—there had never been any cause for severe emotional stress. Men of peace became fighting men. Life had been defined previously as something to protect; now, as soldiers, they were asked to destroy it. Demands were made on physical endurance that had never been made before. War had in it all the chances for extreme emotional distortions.

Not war alone, but every crisis situation finds many individuals with habitual reactions quite unsuited to the new and strenuous conditions. They are thrown back upon their inadequate emotional organization, in situations that demand radical behavior readjustment. There is a feeling of inadequacy; fears and anxieties arise, with a struggle for self-control and a dread that it cannot be maintained. Crisis situations, such as war, famine and other disasters, do not occur often for most people, but they are of interest to social psychiatry since they show the behavior distortions of daily life in magnified form. Individuals are always facing crisis situations, not so spectacular as these, but nevertheless important in the adjustments of most individuals. These crisis situations include every aspect of life—social, economic, and religious. There are disappointments in love, lack of social recognition, disturbances in the home, death of a loved one, failure in scholastic work, ill-health, financial difficulties, with the development of many distorted ideas. There is a desire to escape from crisis situations where habitual adjustments cannot be made. In many cases there is a realization that the issue must be faced, so the thought of escape is repressed, creating a conflict situation. The development of a psychoneurosis is one way out. Any physical or mental symptom may appear; in fact there may be any type of abnormal adjustment that will be of interest to the social psychiatrist. The range of maladjustments extends from the unstable child to senile dementia in old age. It includes every variant, pathological type found in the psychoses and neuroses of the individual. There are also pathological collective manifestations in the activities of crowds, mobs and the public. The behavior of both individuals and groups is intelligible only in relation to the situation in which it has developed.

The Psychoses

The simplest classification of mental diseases includes three divisions: Organic Psychoses, Toxic Psychoses, and Functional Psychoses. Under organic psychoses are included diseases in which there is neural deterioration or actual brain damage. Paresis and senile dementia are the most important in this category. In toxic psychosis, there is an abnormal reaction precipitated by conditions resulting from disease, alcohol, drugs and other exogenous toxins. In psychogenic or functional psychoses, constant organic or toxic factors have not been found. Dementia præcox, paranoia and manic-depressive insanity are important in this group.

Records show that dementia præcox constitutes 27 per cent of the mental cases reported. This psychosis is very imperfectly understood, but the social psychiatrist proceeds on the assumption that it is a compensatory distortion for getting away from a situation in which the subject is not adjusted. Both social and physiological causes may be contributing factors. The chief symptoms are emotional indifference, defects of interests and judgment, seclusive attitudes and negativistic conduct. All the mental phenomena found in dementia præcox are present in normal life in varying degrees.⁶ Even those who have made fairly successful adjustments to life may have shut-in, seclusive types of personalities evidencing negativistic behavior. There is a tendency to withdraw from contacts and get away from reality on the part of many who are not dementia præcox personalities. Many "dementia præcox personalities" never become institutional cases but might do so if they had some precipitating experience. Social psychiatry is especially interested in these incipient cases for early treatment and prevention.

Each case of dementia præcox is different in so far as the mental content is concerned, since the experiences leading to a compensatory adjustment have been different in every case. Each adjustment of this type will have to be understood in terms of the interaction of the biological and social processes in the cases concerned. Any environmental factor may be important in the development of a

⁶ The social psychiatrist maintains a better orientation in the field if he makes comparisons between normal and abnormal adjustments since there is no break in continuity between the normal and abnormal. Both develop in the same adjustment process.

schizophrenic personality. It all depends on how the factor is defined and becomes a part of a constellation of experiences. In dementia præcox the individual gives up the struggle that is common to all people for a constructive compensation for any defects in personality. He turns to compensatory distortions and retreats into a world of unreality. In some cases the withdrawal from situations that make too many demands is so complete that the individual becomes impervious to the world of reality, remaining in apathetic silence, requiring the care given an infant. This type of adjustment has led to the belief that dementia præcox is incurable, but instances are recorded of the complete recovery from this type of adjustment.

Paranoia is also a compensatory adjustment mechanism in relation to the world of the individual, the objects of which are considered as unfriendly to his welfare. In true paranoia there seems to be an immutable system of delusions, including ideas of persecution and a feeling of grandeur. Back of the misinterpretations of concrete situations there is a social history of adjustments. We know that individuals start life in a social heritage without any objects or situations being defined, but through experience they develop either normal or distorted conceptions regarding various aspects of their worlds, and especially about themselves. The manner in which an individual has defined his own "self" in relation to other people and the objects in society in general will determine how paranoid his personality will be.

Few people go through life without delusions of persecution. Juveniles who are often punished sometimes feel that they are foster children or that they are not wanted. Some people believe that they are being crowded out of situations or are being neglected or are not shown due respect. The difference between the delusions of the paranoid and the delusions of others is merely a matter of degree. The former probably are not more difficult to change than the delusions of some normal people. In most cases the organization of the total personality prevents the delusion from playing a dominant rôle, while with the paranoid other elements in the total personality make the delusion important. The attack in treatment should not be on the delusional element alone but on the combination of attitudinal mosaics in the mental organization. Many cases of paranoia have developed following some

failure, as in a law-suit, where the individual loses in his struggle with others, thus showing a definite social reference.

Expansive ideas and feelings of grandeur are usually a part of the total mental organization of a paranoid. There is, for example, the formulation of some plan to cure all the ills of the world. In my work as a Social Service Investigator for the city of Chicago I came into contact with the leader of a group in which all the members had paranoid personalities. Most of them were inventors—in each case of some article not appreciated by the public. There had been worked out by the leader a detailed and elaborate scheme for curing all the social, economic and political ills of the world. Money from the inventions would eventually make possible the realization of all plans. A geographical location had been selected for a demonstration of the plan. The life history of the leader, replete with rebuffs and failures, showed the process by which he had reached his present adjustment. Innumerable persons have dreamed of plans for saving the world, or at least of altering conditions in some particular locality, but only certain persons go to extremes with their expansive ideas in such a way as to insulate themselves from a world of reality. These expansive ideas are always related to concrete conditions as they have been defined by the subject. In certain cases expansive ideas disappear or tend to disappear as the individual grows older and gets tired of trying to change the trends in society.

There are not many people subject to the involution and pre-senile psychoses. The climateric sometimes leads to a psychosis, but the majority of women do not develop any abnormal reactions at the menopause. It is claimed⁷ that there are no scientific grounds for correlating the biological and physiological changes in the menopause with any mental phenomena that may be in evidence at that time. It must be remembered that the individual approaches the period with some anxiety. Society has so defined it that it is a dreaded experience. Some women fear that it will be the end of their sex lives, and the break-up of a marital adjustment. There may be the thought of growing old and of being no longer attractive. Children are leaving the home. A habitual life adjustment is changing. As has been pointed out, unless there is some external

⁷ *Jl. Neurology and Psychopathology*, April, 1932, editorial.

interest there may be a tendency to subjectivity and introspection.

In senile psychoses there is a definite organic condition, but there are also delusions and attitudes concerning people within the world of the individual. When a senile wife accuses her husband of infidelity is she revealing a repressed fear that developed before she reached senility? Many of the repressions of earlier years may be released once there is a weakening in the mental and biological processes. Fabrication may be related to repressions and conflicts. Indecent exposure may be evidence of a repressed desire. We can be sure that any adjustment revealed at this time is in some way a part of past experience. All the various psychoses might be discussed in this manner and compared with normal behavior, but space does not permit. Social psychiatry should approach them all with the realization that they are adjustments in life made by people who were born into a social heritage without a personality of attitudes, desires, ambitions and habits. While the clinical status of the individual may show some organic condition or physiological upset, his social behavior is never independent of his mental organization of past experiences.

There is an ever-growing realization that mental and nervous disharmonies exist not only with an organic reference but with a social reference as well. Trigant Burrow has pointed out that they occur not only within the individual but within social clusters, such as the family, and in social, religious and political groups.⁸ Mr. Burrow draws attention to the fact that there "exist definite conditions of mental disease within the individual which are directly corroborated and sustained by those composing the individual's milieu." In some homes there obtain definite conditions of insanity. In other groups there are definite paranoid conditions for those in places of responsibility. An individual discord or mental disharmony is but the "symptom of a social discord." While insanity can be approached through an organismic study, it can also be apprehended through an analysis of social adjustments. Even in paresis there are attitudes that have come from experience.

⁸ "Insanity a Social Problem," *Amer. Jl. Sociol.*, XXXII:80-87 (July, 1926).

Psychoneuroses or Neuroses

Neurotic patients constitute a large portion of the cases dealt with by social psychiatry. A complete classification of psychoneuroses would only confuse the reader. Hysteria, neurasthenia, psychasthenia and anxiety neurosis are the general categories. Both the organicists and the functionalists have advanced theories about hysteria but they are too elaborate and too numerous to be discussed here. It is well to remember that any factor toward which an attitude can be developed may be important. Somatic factors condition experiences just as do other factors. An individual can develop a neurotic attitude concerning an organic condition, but that does not mean that the organic condition necessarily led to the attitude. Any physical condition is an experience and therefore results in attitudes, but infected tonsils or a gastric ulcer will not necessarily lead to neurotic attitudes or to any attitudes of a definite variety. Organic conditions are important according to the way they fit into the total experience of an individual. Merely because they are obvious factors is not evidence that they are the most important factors.

In most cases where hysteria has been studied, it has been traced to a psychic source. There are many mooted questions about the rôle of suggestion and repressed painful ideas in relation to hysteria. A great many psychiatrists are agreed that hysteria is a more or less unconscious effort to escape from an intolerable situation. There is often a conflict between what one feels he must do and what his life organization postulates. Individuals have hysterics in order to control people and to control situations. Hysterical symptoms function to protect the subject, to insulate the patient from the real difficulty, to escape from a distasteful situation. Usually the individual has struggled previously to relieve the situation in some other way but has failed.

In neurasthenia there is fatigue, what behavior specialists call selective fatigue. The patient becomes tired in those situations where there seems to be maladjustment, revealing an inability to concentrate, a feeling of inferiority, anxieties, and even a fear of insanity. Neurasthenia is tied up in some way with the adjustments made by the patient in various stages in life.

In psychasthenia there is a feeling of insufficiency with many obsessions, anxieties and morbid doubts. Psychasthenic ideas are incoherent, fragmentary, and are regarded as substitutes for distasteful ideas. Obsessions may be organized around any object, experience, or situation in life. Undesirable experiences of any type seem able to call out the obsession. One of the peculiarities often present is the inability to reach a decision, and when one has been reached there is often painful mental doubt. It seems to be an attitudinal adjustment in a situation that is unpleasant or difficult for the patient.

In anxiety neurosis there is a morbid fear that something dreadful is about to happen. There are present all of the organic disturbances that accompany fear. It is difficult to tell whether the physical condition has been a factor or whether it has been caused by the mental disturbance. One finds in society a great variety of apprehensions with the anxiety neurosis differing from them only in the degree of intensity. A student in my classes worried so much about examinations that she developed violent headaches and was sure she would fail. If allowed to take the examination in the office or a day later, she was all right. There seemed to be an element of competition in taking the test in the room with others that bothered her. All her life her parents, relatives and teachers had defined her position as competing with older brothers and sisters who had been very successful. The fear is always related to the social situation of the individual, even though he may not be able to recall the exact experience at once.

Constitutional Psychopathic Inferiority

Constitutional psychopathic inferiority is becoming rapidly a wider and more inclusive group designation. In it have been placed all cases of mental disharmony and maladjustment that would not fit in any well-established category. It includes those individuals who are not equipped to meet the demands of their everyday existence. They are persons who cannot be depended upon. Many behavior specialists believe that there is a constitutional reason that has existed from birth. An interesting problem for social psychiatry is to find out whether such a social adjustment is due to a lack of interest in the situation or to an inadequate per-

sonality caused by some constitutional inferiority. Cases are given of individuals who failed to adjust in the ordinary occupations of industrial life but who were well oriented in the army during the war, even to the extent of receiving promotions. The individuals of this group offer an interesting study in social psychiatry, since they have been connected quite definitely with prostitution, vagrancy, delinquency, alcoholism, drug addiction, and other forms of social maladjustment in which social psychiatry is interested.

Some other pathological adjustments of interest to social psychiatry are pathological lying, vagabondage, kleptomania, pyromania, abnormal sexualism and suicide. These should be approached with the understanding that there is no uncaused behavior. Furthermore, there are at least as many reasons for doing things as there are persons doing them. Destitution and poverty are not the only causes for stealing. Other explanations of kleptomania may be found if the case is studied through the personality organization of the individual, that is, through his adjustment to situations that have been defined by him through experience. The same is true of any other adjustment. Pathological lying has been defined as falsification disproportionate to any discernible end in view. This conclusion could never have been reached through the study of the personality organization of the individual in relation to his experiences in a situation. One reacts to an immediate situation through his past experience, and there is always possible an explanation of any behavior occurring in making adjustments to situations. This is true of all the social variants involved in the pathological adjustments mentioned above. Many of these adjustments are substitute reactions for some mental conflict brought on by an unfortunate social definition. Individuals have become pathological through association with people who have no respect for a human personality and have played with the self-respect of others. Those who violate the self-respect of individuals have done as much injury to normal mental life as those who commit rape.

Social psychiatry is concerned with all the psychopaths in society: cranks, eccentrics, poseurs, etc. In case after case it is revealed that psychopathic personalities are caused by reacting in an emotional way to only one aspect of a situation, quite ignoring the fact that a situation is a constellation of attributes, a configuration whose parts are important only in relation to other parts. The

Gestalt psychologists have told us that people do not react to isolated elements but to a configuration. Study of psychopathic personalities reveals the fact that they have become psychopathic because they have responded in an emotional way, for a long period of time, to isolated facts. A situation is defined by a psychopath through one element in the situation. Persons are defined through a single personality attribute. Other objects are acquired in the same way. This reaction to a single attribute may be the means used to define one's "self." Some failure or a single experience may be the basis for his conception of himself. Out of this type of reaction comes the psychopathic personality. This is the conclusion the author has reached in the study of a great many psychopaths.

The Social Basis of Psychopathology

We have tried to emphasize the fact that all psychoses and neuroses develop in relation to social situations. Although it has not been demonstrated, there is little doubt that some individuals inherit less resistance to mental abnormalities than others, just as some inherit more resistance to tuberculosis than others. But resistance to psychoses and neuroses is also a matter of integrating habits and attitudes for meeting social experiences involving stress and strain. This is seen when one discovers that all psychoses and neuroses are modified by individual experiences and the personality of the individual. The psychoanalyst believes that a potential neurotic or psychotic is one who has a conflict that should have been solved in childhood. A person who because of his inheritance has more resistance to psychoses and neuroses than his neighbor may escape both while his neighbor makes an adjustment involving one or the other. This may be true because the neighbor passed through a greater number of critical experiences. Accordingly, resistance due to heredity is important only in terms of social experiences. If such resistance can be discovered by clinical psychiatrists, they can advise individuals about the types of adjustment situations they should meet.

In the discussion of the field and problems of social psychiatry we have tried not to lose sight of the great similarities between normal and abnormal people. In both cases we find personal systematizations that have been developed by exactly the same processes.

Where there are mental and nervous disharmonies the individual is unwilling to part with his false impressions. This is also true of people who are regarded as normal. This fact is discovered when one tries to change the false impressions of the average man concerning his religious or political affiliations. He himself is equally incompetent, also, to recognize his own impressions as false. Normal people do not get a disinterested, objective view of their own attitudes and beliefs. If social psychiatry looked upon normal people as patients and tried to change them in their life adjustments, the problem of treatment would be almost as great as it is with abnormal people. If there is any doubt about this, let the reader try to separate anyone from his preferences, beliefs, opinions and obsessions. It is not abnormal human nature that is hard to change, but human nature.

On the therapeutic side, social psychiatry needs to give psychoses, neuroses and other mental emotional adjustments a proper social definition. The public needs to be informed concerning the true nature of these adjustments. They are not conditions to be ashamed of any more than pneumonia or a broken leg. It is no more disgraceful to go to a psychiatrist than to a medical doctor about some physical ailment. These variant adjustments do not take place solely in some crisis. They have been developing for some time and have been precipitated by some critical experience. It is possible to guard against most of these compensatory distortions since symptoms can be recognized, and many people so afflicted can be cured. A "nervous breakdown" is a mental condition or adjustment and not a disease of the nervous system. The social definition of compensatory distortions is an important factor in relation to these adjustments. There is almost a social neurosis regarding mental maladjustments, an attitude that goes back to the dark ages of history when the "madman" had an evil spirit dwelling in his body.

Group Maladjustments

Thus far we have centered our attention on individual behavior and its inextricable interrelation with a social situation, but there are also groups in society which have pathological systematizations of ideas. These groups guard their false impressions with all the tenacity found in an individual. They are impervious to any view

that is at variance with their own self-envelopment. To begin with, many arbitrary groups and their patterns of behavior are adjustments to a world of reality that has not been friendly to certain ideas held sacred by the members of the organizations, ideas coming from experiences in a social milieu. This unfriendly attitude on the part of the outside world tends to enhance the systematizations of ideas that led to the formation of the group. In its clash with the rest of the world there exists within the group a matrix for paranoid attitudes of persecution and grandeur. There is a pathological group egotism. Like psychopathic individuals, these groups tend to react emotionally and only to isolated aspects of a situation.

There are groups, syndicates and rings in which there exist pathological systematizations. Sects, cults, secret organizations of a certain type often manifest self-involvements with pathological ideas. Dr. H. A. Miller discusses at length the "oppression psychoses" of races, nations and classes.⁹ Trigant Burrow says that "there are today families, communities, institutions, and nations that are utterly dominated by systematized mental prejudices which may be proved upon analysis to be directly parallel to these unchallenged paranoid states occurring within the individual."¹⁰ Pathological behavior on the part of groups has been manifested in definite patterns of behavior under certain circumstances. Crime, racketeering, and vice are organized manifestations with groups sponsoring their actualization. Orgiastic behavior is often group behavior. Ruthless procedure in business, corruption in politics, extreme emotionalism in religion, and dancing marathons in social life are evidence of group behavior of a pathological sort. Lynchings are the result of mob mental systematizations. Destruction of property after a football victory falls in this category, though it is a transitory condition.

History records many manias and obsessions that involve groups, crowds and publics. The Flagellants in Europe and especially in Italy in 1260 and the dancing mania in 1379 are good examples. The Crusades that agitated European nations for two centuries, the witchcraft mania of the fifteenth century, abounded in pathological behavior. The Tulipomania in Holland in the seventeenth

⁹ See *Races, Nations and Classes*, 1924.

¹⁰ *Op cit.*, p. 84.

century and the Mississippi Bubble provide excellent material for the study of crowd behavior with psychoneurotic characteristics. Religious revivals with thousands on the ground in trances are significant data for social psychiatry. Suicide fanaticism points toward group insanity. The Gold Rush and the Florida Land Boom were occasions for irrational, emotional, random behavior. Every culture, no matter what its stage of civilization, has had demonstrations of crowd behavior regarded as pathological.

Any abnormal behavior of individuals or groups that involves an attitudinal adjustment to a life situation falls within the field of social psychiatry. Any factor in behavior that can be given a social definition or that can become the object of individual or group attitudes is important in cultural adjustments. Organic defects are always factors in behavior, not because they necessarily lead to any particular type of adjustment, but because the individual reacts to them in terms of his social situation. Even feeble-mindedness, congenitally predetermined, is of interest to the social psychiatrist. Society has not been organized for the feeble-minded, hence it is inevitable that they will be continually maladjusted. Any compensatory distortion in behavior is an adjustment to an actual situation.

BIBLIOGRAPHY

- Adler, Herman M., "The Relation Between Psychiatry and Social Sciences," *Amer. Jl. Psychiatry*, VI:661-670 (Apr., 1927).
- Anderson, V. V., *Psychiatry in Industry*, 1929.
- Barrett, Albert M., "The Broadened Interests of Psychiatry," *Amer. Jl. Psychiatry*, II:1-14 (July, 1922).
- Bernard, L. L., *An Introduction to Social Psychology*, 1926, Ch. XIII.
- "A Criticism of the Psychoanalysts' Theory of the Libido," *Monist*, XXXIII:240-271 (Apr., 1923).
- "The Psychoanalysts' Theory of the Conflict-Neurosis," *Amer. Jl. Psychol.*, XXXIV:511-530 (Oct., 1923).
- Brown, L. Guy, *Immigration: Cultural Conflicts and Adjustments*, 1932, Ch. XII.
- "The Sociological Implications of Drug Addiction," *Jl. Educa. Sociol.*, IV:358-369 (Feb., 1930).
- Burgess, E. W., "The Cultural Approach to the Study of Personality," *Mental Hygiene*, XIV:307-325 (Apr., 1930).
- Burnham, W. H., *The Normal Mind*, 1924, Chs. XX-XXI.

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- Burrow, Trigant, "Our Mass Neurosis," *Psych. Bull.*, XXIII:305-325 (June, 1926).
- *The Social Basis of Consciousness*, 1927.
- Cameron, H. C., *The Nervous Child*, 1924, Chs. IV-XII.
- Fenton, Norman, and Morrison, Dorothy E., "A Bibliography of American Contributions to War Neuropsychiatry," *Amer. Jl. Psychiatry*, VI:507-518 (Jan., 1927).
- Folsom, J. K., *Social Psychology*, 1931, Ch. XIII.
- Hamilton, G. V., *An Introduction to Objective Psychopathology*, 1925.
- Healy, W., *Mental Conflict and Misconduct*, 1917.
- Johnson, Alice E., "The Constitutional Psychopathic Inferior: A Problem in Diagnosis," *Amer. Jl. Psychiatry*, II:467-472 (Jan., 1923).
- Krueger, E. T., and Reckless, W. C., *Social Psychology*, Ch. XIII.
- Lowrey, L. G., "Environmental Factors in the Behavior of Children," *Amer. Jl. Psychiatry*, VI:227-240 (Oct., 1926).
- Martin, E. D., *The Behavior of Crowds*, 1920.
- Murphy, G., and Jensen, F., *Approaches to Personality*, 1932.
- Myerson, A., "Hysteria as a Weapon in Marital Conflict," *Jl. Abnormal Psych.*, IX:1-10 (Apr., 1915).
- Plant, James S., "Sociological Factors Challenging the Practice of Psychiatry in a Metropolitan District," *Amer. Jl. Psychiatry*, VIII:705-716 (Jan., 1929).
- Sullivan, H. S., "Socio-Psychiatric Research," *Amer. Jl. Psychiatry*, X:977-992 (May, 1931).
- White, William A., "Psychiatry and the Social Sciences," *Amer. Jl. Psychiatry*, VII:729-748 (Mar., 1928).



CHAPTER XI

EDUCATIONAL SOCIOLOGY

THE field of educational sociology, as its composite name might suggest, is both broad and indefinite. On the one hand, it constitutes a subdivision of the general field of sociology. On the other hand, it forms a subdivision of the nascent science of education. As a phase of sociology the term "sociology of education" might be more descriptive, comparable to another division known as the "sociology of religion"; but most courses dealing with the subject have been given in schools of education where the term educational sociology is preferable. Its subject matter is still inchoate enough to require fuller orientation in each field.

I.

As an integral part of general sociology educational sociology covers the whole range of educative factors in the social process, or the total of social processes which make up the moving concern we call society. In some manner every institution, every culture pattern, every social group, and every kaleidoscopic phase of social interaction is both a means and an end of education. Each element in the complex fabric of social motion utilizes prior training and provides present educative training through participation. More specifically, social interaction is educative in itself and sharing in human enterprises becomes a means of educating one into personal and social effectiveness.

If sharing in social action educates, it also demands education. The smooth working of institutions, the formation and perpetuation of culture patterns, the organization and functioning of social groups, and the methods and results of social intercommunication depend upon the amount and kinds of education possessed by the participants. Hence preparation for the effective management of social agencies constitutes an end of whatever specialized education society provides.

EDUCATIONAL SOCIOLOGY

The above general statements should aid in placing educational sociology among the groups composing the National Sociological Society. It is related to theoretical sociology by reason of the presence of educational phenomena in all social action. Social theorists must evaluate educational factors no less than economic or sociobiological factors in the social aggregate. Conversely, the educational sociologist can no more disregard sociological theory than the educational psychologist can slight psychological theory. More obvious interrelationships exist between educational sociology and the more definitive groups, such as rural sociology, urban sociology, the sociology of religion and the family, anthropology, social psychology, etc. Each of these divisions must reckon with educational problems. But the educational sociologist is interested in these same problems, albeit from a different angle. He does not presume to incorporate any of the functions of other sociologists but must reach for data and problems into every phase of society in which education is taking place. Hence there is a certain amount of inescapable overlapping as in other adjacent fields of knowledge. Yet it is no more serious than similar overlappings in the subdivisions of chemistry, biology, and psychology. Some further details will clarify these interrelationships in the twilight zone.

In the study of primitive societies the educational sociologist finds valuable material. He does not deal with them in the integrated sense of the anthropologist and historical sociologist but sifts out their purely educational activities. Before the school was differentiated education was diffused. Each institution or phase of society educated children and older people for its own purposes. The child had to be trained to find food, to make shelters, to handle the simple tools and weapons available, and to carry on the folkways and mores, the knowledges and skills the tribe had accumulated. In these societies education is reduced to its lowest terms and hence their study affords the educational sociologist data and insights difficult to obtain in a more complicated social organization.

In a similar way the educational sociologist ranges over into the educational aspects of rural and urban sociology. The rise, decadence, and reorganization of rural communities present educational data and problems which he must understand if he is to assume his share in the solution of some of our most serious current difficulties. Likewise, the problems of our overgrown cities are not less

educational than economic, governmental, and ethical. Urban congestion is the antithesis of rural isolation and the antithetic phenomena they offer form rich laboratory materials for the educational sociologist.

Our dominant institutions, the family, the church, industry, and the state also come in for review by the educational sociologist. His treatment, however, is confined to their educational aspects. Next to the school, the family still remains our most virile educational unit. Its infinitely varied educative impacts upon the child mind and character, its close interrelationships with the school, and its problems in directing juvenile activities offer abundant research matter to the educational sociologist. From the reverse angle, he must face the problem of the amount and kinds of education needed to promote worthy home making and a wholesome family life. He is also interested in the church, not as an ecclesiastical or ethical organization, but as an educational institution. Much of our educational history is tied up with the church. In all stages of society religion has been a dynamic and stabilizing force in emotional direction and control and still must be reckoned with in the development of the young. Hence whatever contributions it has made, or can now make, to personal and social growth, and whatever contributions the agencies of formal education can make toward vitalizing religion among our young people become problems for the educational sociologist to wrestle with.

Not less significant are his responsibilities in interpreting the problems of education as they are related to industry and the state. The economic order underlies the individual and social planes of living. It is the basis of vocations, and vocational service not merely provides education but demands increasing amounts of it as advances in efficiency are expected. Here the educational sociologist allies himself with the economist, investigating the reciprocal relations between the economic demand for educated workmen and the vocational regimen and output of the schools. With reference to the state, his field is still broader. In our day the state has become the institution of institutions, the general overlord of all social agencies. As a means of safeguarding and perpetuating this overlordship it has, in most nations, taken over the school. Hence the school is now mainly a civic, or public, enterprise, consumes nearly two-fifths of state revenues, and its management has become one

of the most important and difficult of political problems. How the state shall administer the schools, how the schools shall train citizens to share in state responsibility, and other problems arising out of this mutual dependency the educational sociologist must discover with as much scientific precision as the available data will permit.

Probably the most intimate and vital of all these inter-division relationships is that between educational sociology and social psychology. The social psychologist studies the psychic factors involved in group action. He is interested in the processes by which social groups mould individuals to type, and conversely, those by which individuals acquire organizing skills, personality adjustments, culture patterns, and social ideals. In other words, his major problem is socialization, how the individual is inducted into the social order, how group likenesses and social differences are brought about, the significance of social docility and revolt, etc. Now these principles, data, and problems are basic to the educational sociologist's procedure. Without a sound social psychology his approaches to educational situations will add little to the insight and programs of the individualistic educational psychologist. There can be little doubt that the slow progress of educational sociologists in reaching a consensus and in focalizing and orienting their problems has been due to the fact that a major portion of writers and investigators entered the field impregnated with an individualistic psychology from which it has been difficult to escape. The result has been an undue floundering back and forth between the treatment of issues in general sociology and those of a school regimen dominated by individualistic ideals and methodology without weaving the treatment into any sort of educational fabric. With some reservations, the relationship between social psychology and educational sociology bears a close resemblance to that between general psychology and educational psychology, progress in each field being dependent to no small extent upon effective mutual service between the two sets of investigators.

Before leaving the sociological aspects of our subject one other means of determining the field and problems of educational sociology must be analyzed. If we deal with society by studying its major social processes, such as passing on the social inheritance, social organization, social control, and social progress, we shall find other bases of reciprocal service between education and social action.

Every incidental agency through which our folkways and mores, our æsthetic standards, our knowledges, skills and techniques are transmitted from one generation to another is an active means of inducting the young into the cultural media of the mature. But this incidental education is clumsy and inefficient; hence the responsibility of devising more speedy and efficacious methods of conserving the social heritage is transferred to the school where it becomes a dominant motive in the search for objectives, curricula, and methods.

In a similar way social organization, including our established institutions and less fixed social groupings of the primary, intermediate, and secondary sort contain inherent educative stimuli, and their administration and improvement become essential ends to be served by formal schooling. Administering the varied agencies of social control—public opinion, law, ritual and ceremony, ethical precepts, etc.—develops insights, intelligence, and character traits, thereby serving as both means and ends of education. Finally, the discoveries, inventions and creative arts which bring about social progress serve as media for inspiring the young and incite school endeavors to find curriculum materials and methods adapted to the development of creative minds. A review of sociological literature shows that all sociologists emphasize education as a leading factor in one or more of these major social processes. Spencer, Ward, and Wallace are deeply concerned with education as related to the social heritage; Cooley and Dewey with the reciprocal services of education and effective social organization; Hayes with the school as an agency of training for social control; and Ellwood and Todd with efficient educational institutions as the chief means to social progress. Any rounded system of educational sociology must recognize the educational implications of each of these social processes, tracing the interrelations of the incidental educations of extra-school social contacts and the formal training offered in the schools.

II.

Up to this point I have dealt with educational sociology in relation to the general field of sociology. It is even more necessary, since the subject has had its chief development and uses in schools of education, to clarify its position and functions in the educational

field. For this purpose a brief review of the different aspects of educational scholarship is essential.

The most general treatment of educational theories and problems comes from the philosophy of education. It is the province of the educational philosopher to discover, compare, and weigh educational values. What are the major satisfactions of life, what sorts of education are best adapted to attain these satisfactions, and what are the basic principles to be used in determining the ways and means of providing the kinds of education needed? Such are the problems attacked by the educational philosopher and they underlie the work of the educational sociologist. In every department of knowledge the theorist provides the premises on which the scientist builds his researches. Against carefully reasoned hypotheses the detailed investigator must check his results. Likewise, by the results of minute investigations the philosopher must recast his theory. In education, as in other realms of knowledge, the philosopher precedes the scientist and his theoretical insight lays foundations for the premises upon which the educational psychologist and educational sociologist must work. Moreover the balance and effectiveness of the scientists in education—and the educational sociologist struggles ever toward the scientific—depend quite largely upon the soundness of his educational philosophy. It is obvious, then, that the educational sociologist must ever maintain a coöperative relationship with the educational philosopher, seeking his larger vision and offering in return whatever his more scientific data and methods can contribute toward verifying and revising educational theory.

With the history of education the educational sociologist is also deeply concerned. The study of earlier racial, economic and cultural groups adds a time perspective to the space perspective of contemporary social groupings. Through tried educational processes, experiments, and school systems we gain insights into educational cause and effect. The gradual emergence of the school as a social institution, its accretion of new functions as they were sloughed off by other institutions, the trial and error advances in administrative control and school regimen, in fact, every phase of evolution through which the school has grown into one of the largest of human enterprises, constitute vital data for the educational sociologist. It may be true, as often alleged, that our present knowledge of

educational history is too sketchy to afford the help needed. Certainly such a belief underlies the relegation of courses in the history of education to a secondary position in the training of teachers. Yet this very weakness emphasizes the need of a vitalized history of education related intimately to the life of past cultures from which the educational sociologist may derive comparative data for use in his researches. By way of reciprocal service it is probable that the educational historian has no greater need than that for the social vision and analytic methods which the educational sociologist should aid him in acquiring.

We now come to the most significant phase of educational scholarship which educational sociology seeks to serve, that of developing an objective science of education. I am not one of the extremists who believe that education can be reduced to an entirely exact, or quantitative science. It seems to me that common sense must teach us that the process of education is so complex, so freighted with personal equations and personality adjustments, and so organically a part of illogical human nature that a pure science of education is a fantastic dream. The art of education has always been, is now, and must continue to be as vital a factor in educative growth as any science we may be able to develop. Even the practice of medicine, the most scientifically founded of our practical arts and the one with which educators most often compare their work, remains merely a pragmatic approach toward an exact science. Yet there are vast areas of the educational field which can be reduced to objective scientific procedures. These are in dire need of exploitation. It is probably this need, coupled with a newly inspired and enthusiastic drive toward its fulfillment, that has led to a twisted perspective of possibilities. After eliminating any excessive exuberance on the part of newly gowned Ph.D.'s, however, the advances toward a science of education in the past quarter century have been so significant that we are justified in claiming educational sociology as one of its prospective pillars.

Just as anatomy and physiology are the basic sciences in medicine, so educational psychology and educational sociology are the foundational sciences underlying education. Likewise, as these basic sciences in medicine need to be buttressed by chemistry and bacteriology, the foundational disciplines in education need the support of biology, neurology, and the social sciences. But thoughtful edu-

cators agree that the scientific methodology and conclusions most vital in establishing a science of education will come from the complementary efforts of educational psychologists and educational sociologists. Their twin responsibility is inherent in human nature and educational institutions. To make this clear some elaboration of the educative process is necessary.

What one is and what one does result from a combination of inner nature and outer compulsions. The wants and needs of one's psychic and physical organism constitute a series of drives to action and consequent education. But these drives are met, interfered with, twisted about and directed by environing physical and social forces. Weather impinges, natural resources limit, things obstruct. The wants and needs of innumerable social groups—families, churches, industries, governments, gangs, cliques, clubs, fraternal and philanthropic organizations—exert a series of pressures from which the individual cannot escape. If we take education in its larger sense of directed growth, the stimulus is equally from within and from without, equally individual and social. From one angle we may say that the individual educates himself; from an opposing angle the individual is educated in spite of himself. The amount and kinds of education he may acquire depend upon his own capacities; but they depend equally upon his opportunities. Individual differences, regardless of any advances we make toward democracy, are no greater than social differences, individual likenesses than social likenesses. Moreover these complementary factors in action and education appear equally axiomatic whether we accept the organic view of human nature as an indivisible compound, in origin, manifestation and destiny, of the individual and the social group, or whether we assume the individual and the social as separable phenomena.

It is these complementary aspects of human nature and education that need treatment in scientific detail. This need must be met by the joint efforts of the educational psychologist and the educational sociologist. Each of the basic problems the educational psychologist attacks from the individual standpoint, the educational sociologist from the group standpoint. The former studies the original nature of the individual, his neural equipment, the stimuli and drives to mental action, the methods and limitations of growth, and other phenomena of individual learning. His data and problems

center about individual growth and achievement. On the other hand, the educational sociologist seeks the origin and nature of social groups, their equipment of communicative and organizational devices, their pressures upon the individual to compel social interaction, the methods and limitations of social participation, and other phenomena of socialization. His researches originate with the group and his problems focus upon group achievement and institutional efficiency. The educational psychologist is concerned with social phenomena only as they affect mental growth and changes in the individual. The educational sociologist is concerned with the individual only as he shares in social action. Since no individual can be isolated from social contact, and no group can be differentiated from its individual components, it follows that every stage of the educational process requires study from both the psychological and sociological bases. Thus educational psychology and educational sociology find themselves dealing with the same educational problems, attacking them one through individual, the other through group action.

Their complementary functions can be made clear by showing the relation of each to the different educational processes, or divisions of school work. The usual divisions are aims and objectives, curriculum, administration, teaching method, and disciplinary organization and control. In each of them the above outlined dichotomy is inherent. Some effort was made by early writers to make vertical, or subject matter distinctions, assigning the determination of aims and objectives to educational sociology and the elaboration of methods of attaining these ends to educational psychology. More careful analysis and thinking revealed that such efforts were futile. The psychologist maintained conclusively that the nature and needs of individuals were as significant in fixing school objectives as were the activities and needs of society. Likewise the educational sociologists showed that the socialization of the individual through directed group activities and shared responsibilities was as necessary a part of effective method as was the most economical means of acquiring individual knowledges and skills. Thus the two sciences must be held jointly responsible for investigating the leading problems connected with each of these school processes.

In the field of administration a like joint responsibility prevails. The administration of our school system presents two sets of prob-

lems—those with which the general public must deal, or external control, and those which must be handled by the technical staff, or internal control. If external administration is to be effective it must be sponsored by educational statesmen, men who are broadly educated and specifically trained as school executives. If internal administration is to be conducted smoothly and efficiently it must be handled by professional people trained to meet its problems. Both types represent men who are thoroughly conversant with the problems of both learning and socialization, and are equally able to deal with individuals and with the varied groups concerned in education, either without or within the schools. In other words, the administration of our schools involves both personal insight and social skills, and the training of administrators requires both individual studies and group participation. Furthermore, the school administrator must ultimately rely equally upon the scientific findings of educational psychology and educational sociology.

As in objectives, method, and administration, so in curriculum making and in student organization and discipline, there are problems involving individuals and groups, personal and social adjustments. Studies of these problems by either the educational psychologist or the educational sociologist must be counterbalanced by studies from the complementary viewpoint before a balanced school regimen can be established or scientifically validated. Since the psychologist preceded the sociologist in the investigation of curriculum and disciplinary problems, school programs have naturally tended to revolve about the individual. Our elementary and high school curricula, for example, have been graded and adjusted to meet individual differences in taste and ability, and have been provided with abundant materials for developing individual knowledges and skills. On the other hand, little has been done to stimulate the shared responsibilities and to organize the co-operative group work necessary to develop social traits and the habit of participating in group enterprises. Training in leadership and followership, serious discussion as a basis for tolerant understanding, and practice in carrying group responsibility as a means of building ideals and habits of social and civic service, have been neglected in favor of direct preparation for individual success. The ability to stand alone rather than the ability to merge self-consciousness into team work, self-control rather than assuming one's share in

social control, have been dominating disciplinary ideals. Such illustrations, and innumerable others might be assembled, suggest the current need of social perspective in dealing with curriculum and disciplinary problems and of the complementary studies of the educational psychologist and the educational sociologist in the reconstruction of both principles and practices.

In concluding a review of educational sociology as a potential basic science in the field of education we may generalize its function as that of investigating every phase of school procedure into which social or group phenomena enter. Its theory centers about the complex processes of socialization as contrasted with those of individual learning. Its problems are found in connection with every significant phase of school work and of the school environment. Even the objectives, materials, and methods of teaching each school subject and directing each school activity, whether curricularized or left in the vague realm of the extra-curricular, come within his purview in so far as they have social implications. If this be deemed a large mission, it may be suggested that similar claims are made for the better established educational psychology without protest. It is here contended, and is generally accepted by leading educators, that each of these sciences are required to guarantee balanced school policies and programs. A broadly founded, smoothly regulated, and efficient school system, equally fitted to develop cultivated individuals and to promote social and institutional welfare, must embody scientific specifications jointly prepared by educational psychologists and educational sociologists.

As the preceding analysis of the field of educational sociology would indicate, the problems it presents are intricate and multitudinous. Many of them have been suggested in outlining its ramifications. Actual workers in the field have been few, most of them being part-time teachers and investigators of the subject. All of them have been pioneers, inching over into specialization from departments of sociology or of education. Consequently they have been mainly occupied in orienting themselves, in delimiting their subject matter, and in making preliminary surveys of the problems encountered. Mere tentative beginnings have been made in developing techniques of study and in pursuing the minute investigations necessary to scientific validation of their premises. Yet many evidences may be found that their general analyses of edu-

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cational phenomena have focussed attention so specifically upon the social aspects of education that their writings and teachings have aided materially in the revision and balancing of educational programs. The great need at present and for the future, as is shown in the paper dealing with methods, is for objective and quantitative research.

III.

A few paragraphs may now be devoted to the discussion of problems in educational sociology.

The transition of our population from rural to urban environments has created a series of socio-educational perplexities. What are the educational values and defects of social mobility? What are the shortcomings and possibilities of socialization in isolated rural districts, and how may they be dealt with in the schools? In what detailed respects does urban congestion complicate the work of the schools? What are its effect upon suggestibility, open-mindedness, coöperability, leadership and followership, criminal tendencies, mob spirit, etc.? What are the educational and social values and weaknesses of highly organized and commercialized amusements? Considerable work has already been done in the study of boys' gangs and on the social and educational effects of motion pictures, but further investigation is needed to show their interrelationships with the school.

Home and family life also need educational study. What are the detailed home educations that require recognition by the teacher? What has been the educative effect of the drift of family discipline from autocratic to democratic forms? What are the educational gains and losses due to the decentralized home in which parents and children separate into differentiated groups and develop loyalties to different organizations? What educational difficulties result from broken homes? What functions and values may be attributed to visiting teachers and parent-teacher organizations? What curriculum materials and activities can be made to function in fostering home making ideals and in preparing the young for parenthood and more wholesome home life? Many of these problems have been analyzed but few have received scientific study.

Religion and the church present numerous school difficulties and problems. What personality defects result from conflicts between

religious and scientific teachings? What are the educational values and defects of the Sunday School and children's religious organizations? What differing outcomes can be discovered from the parochial as compared with the public school? What can the schools do to foster religious tolerance? What, if any, coöperations can be established between the schools and the churches for teaching purposes?

The industrial and vocational fields are prolific of problems for the educational sociologist. What are the educational effects of rapid economic change and industrial integration? How do these changes affect vocational preparation? To what extent do industrial and vocational groups interfere or function in school change? What types of vocational training can be devised that will foster the social service ideals needed by vocational workers? What can be done to promote consumers' education? Much general study has gone forward in this field but the problems are too numerous and fluctuating ever to be exhausted.

No more fertile and needy zone of research can be found than that which links the destinies of the schools with the welfare of the state. Many surveys of state, county, and municipal school systems have been made, but precise techniques of study are still wanting. This is particularly true with reference to public policies and other phases of external administration. What kinds of state, county and district systems are best adapted to secure and maintain school efficiency in a democratic society? What are the needs, possibilities, and dangers of Federal participation in research, standardization, support, and equalization of school facilities? What are the domestic, industrial, and environmental features that determine the age at which the state should take over the education of the child? What are the social implications of education for the subnormal, blind, deaf, crippled, etc.? What are the social backgrounds of the teaching population, and what social and public policies are best adapted to improve teaching service? What are the social requirements and limitations of compulsory education? Limited studies of the teaching population have been made by Coffman, the North Central Association of Colleges and Secondary Schools, the Department of Superintendence, and others, but many features have been overlooked, particularly those connected with public policy. Moreover, the rapidity of social change will require continued

reinvestigation and redirection of school policies and programs as state needs and functions evolve.

The borderline zone between social psychology and educational sociology is filled with unsettled problems. The varied phenomena of leadership and followership; the educational incidence of gangs, cliques, teams, clubs, cultural organizations, both within and without the school; personal maladjustments needing socio-clinical treatment; measuring the results of social stimuli of various kinds and degrees; these and innumerable other psycho-social problems remain in the limbo of speculation and await objective and quantitative studies.

Within the schools problem material of a social nature is so plentiful that brief analysis would be valueless. The only one of the educational processes that has been dealt with to any considerable extent is that of determining school objectives. Bobbitt, Peters, and others have made quite detailed analyses of social activities as a basis for locating objectives and curriculum making. Charters and others have made numerous job analyses which point the way to more effective vocational educations. As a result of these scientific approaches numerous schools throughout the nation have made curriculum surveys and attempted semi-scientific revisions. Without doubt these studies and the continual pleas of educational sociologists for the recognition of social needs have had large influence in establishing the socio-civic studies as the central core in public school curricula. Little has yet been done in the hopeful field of analyzing children's activities as a counter balance and supplement to the studies of adult activities and ideals.

In the field of method and in that of discipline many problems await the social scientist. Social philosophers and educational sociologists have emphasized the value of shared responsibilities, group projects and problems, and organized team activities as necessary phases of teaching method, but little has been accomplished by way of measuring the results of such work. Several studies have been made of the extent and problems of extra-curricular activities, but conclusive findings are still to be secured. The social aspects of discipline have also been analyzed but not objectively treated. Since administrators necessarily make wide social contacts, their vision and practices have included social valuations; yet every phase

of administration contains problems needing scientific research from the social and public standpoints.

By way of brief summary, it may be stated that the field of educational sociology includes a study of every phase of social interaction which presents educational phenomena. The educational sociologist must therefore review the various institutions, organizations, and social processes of society, extracting from each the data and problems which bear upon educational policies, programs, and practices. Participation in the conduct of these social agencies furnishes incidental education which must be coördinated with school procedures, and training students to engage more effectively in the activities carried on by society provides objectives for school work. In pursuing his studies the educational sociologist reaches into several divisions of the general field of sociology for data, but the overlapping treatments are no greater than in other adjacent fields of knowledge. The main function of educational sociology is served through its joint responsibility with educational psychology for developing a science of education. In this connection his investigations must cover the social aspects of each of the educational processes—administration, objectives, curriculum, method, and disciplinary organization. The range of his school problems is therefore limitless, few of them having yet been subjected to objective or quantitative analysis.

BIBLIOGRAPHY

- Brewer, John M., "A Logical Approach to Educational Sociology," *Jl. Educa. Sociol.*, IV:89-92 (Oct., 1930).
 Cooley, C. H., *Social Organization*, 1909, Part I.
 Counts, George S., "The Subject Matter of the Curriculum and Sociology," *Jl. Educa. Sociol.*, I:11-17 (Sept., 1927).
 Ellwood, C. A., "The Sociological Basis of the Science of Education," *Education*, XXXII:133-40, (Nov., 1911).
 ——— "What is Educational Sociology?" *Jl. Educa. Sociol.*, I:25-30 (Sept., 1927).
 Finney, R. L., *A Sociological Philosophy of Education*, 1928, Ch. III.
 Freeman, Frank N., "The Relation of Educational Psychology to Educational Sociology," *Jl. Educa. Sociol.*, III:580-589 (June, 1930).
 Good, Alvin, *Sociology and Education*, 1926, Ch. I.
 Kulp, Daniel H., *Educational Sociology*, 1932, Book I.
 MacIver, R. M., *Society: Its Structure and Changes*, 1931, Ch. II.

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- Payne, E. George, *Readings in Educational Sociology*, I: Chs. I-II, 1932.
———"A Program of Educational Sociology," *Jl. Educa. Sociol.*, II:457-463 (Apr., 1929).
Peters, C. C., *Foundations of Educational Sociology*, 1929, Chs. I-II.
Smith, Walter R., *Principles of Educational Sociology*, 1928, Chs. I-II.
———"The Need of a Consensus in Educational Sociology," *Jl. Educa. Sociol.*, I:385-394 (Mar., 1928).
———"The Value and Scope of Educational Sociology," *School and Society*, VI:41-47 (July 14, 1917).
———"Social Education Through Group Activities," *Pub. Amer. Sociol. Society*, XIII:81-110 (1918).
———"The Problem of Educating a Democracy," *Ibid.*, XIV:145-163 (1919).
———"Present Status and Immediate Future of Educational Sociology," *School and Society*, XVII:421-26 (Apr. 21, 1923).
Snedden, David, *Educational Sociology*, 1922, Chs. III, XXIII.

CHAPTER XII

THE SOCIOLOGY OF RELIGION

ANY inquiry into the field and problems of the Sociology of Religion involves three considerations: the first is the fundamental question as to what *Sociology* is, and what are its functions and purposes. An answer to this question is necessary in order to know clearly what Sociology is supposed to do after it enters the religious field. The second question is: What is *Religion*? Unless there is agreement upon this point, we cannot be sure of the area in which we are working. Finally, on the basis of the answers to the first two questions, we must state the *relation* between Sociology and Religion.

The Field of Sociology

Sociologists today are in substantial agreement that our discipline is concerned fundamentally with the forms, activities, and cultural products of the associated life of men, considered not from the standpoint of the content and purpose of any particular phase of collective life, but from that of the manner, types and results of their association, *per se*, regardless of time and place. It is distinguished from History in that it is not concerned with the historic occasion and chronology of specific, unique events, but with types of events wherever they have occurred, together with whatever underlying general principles may be involved. It may, and must, repeatedly draw upon history for specific data, but when it does, it is in order to use it as an aid to the interpretation of human association in the large, and not at all to present a particular narrative for its own sake. For example, Sociology is not concerned with the American Revolution, nor the French Revolution, nor the Chinese Revolution, nor the Russian Revolution, as such, but it is concerned with the phenomenon of revolution as a manifestation of collective behavior wherever it occurs; and it desires to arrive at a basis of the causal elements of revolution which are generally operative in this type of conflict.

Neither is Sociology directly interested in the purposes of human associations. Economics is concerned with human activities whose purpose is the getting, or distributing, or using of wealth; Politics is concerned with human association for purposes of government; Education is concerned with human association for purposes of learning. Sociology differs from these in that it is not concerned with the reason for these associations, but only with the manner of the association itself.

Again, as many at last are coming to see, Sociology may not deal with ultimate value-judgments any more than may any other science. All that science can do and remain scientific, as Max Weber has clearly stated, is to express its conclusions in the conditional form, *i.e.*, if you wish to accomplish this result, then these means must be employed. Whether the result to be obtained is a desirable one or not, science *qua* science cannot answer, for that is a question of preference and not of fact. Sociology, like other sciences, must confine itself to explaining what *is*, or what *may be*, under a given set of conditions. It must leave Ethics to answer the question of whether or not the particular result is one that *ought* to be. This means, of course, that the function of Sociology is not normative, and that it cannot rightfully deal with the reformation of social ills nor the construction of an ideal social order, important as these are. Sociology may and should be the handmaiden of many "practical" and idealistic ventures, serving to bring together and to interpret materials which the practical idealist may use to further his cause; but there its function ceases.

Conceived of as indicated above, Sociology has three chief phases that are common to all sciences, which, of course, overlap. First of all, it is *descriptive*, depicting the nature of things and events with which it may be dealing at the time. Some of this may be description covering matters which are historical, constructing a picture which is placed before the student's eyes in lieu of his own observation of those particular events; but if so, it is for the reason stated. The second phase is *analytical*, whereby it seeks to break down into its disparate and constituent elements the total phenomenon under consideration, and undertakes to display the components that constitute the particular unit of its study at that time. In the third place, it may be *applicational*, not in the sense of telling what is "best" to be done (for we must observe the precaution above stated concern-

ing value-judgments), but in the sense of telling what may be, or what the possibilities are under the given conditions.

The Field of Religion

Religion has also had many definitions which have not always agreed with one another. According to the largest consensus of opinion of scholars in the field, it seems to be best definable as man's belief concerning beings and powers conceived of as superior to man, upon which man is considered dependent, plus the human activities growing out of his belief. Thus religion is seen to be twofold, consisting on the one hand of a theology, usually expressed in some formal or informal set of tenets; and, on the other, of behavior resulting from that theology. Speaking more generally, we may say that religion has to do with that phase of human thought and behavior, which is clustered about theistic centers of attention. Some will disagree with this conception as too narrow. Strict adherence to it would rule out certain philosophies often classified as religion, as for example, humanism, ethical cultures, and perhaps Confucianism and Buddhism. Nevertheless, this seems to be the distinction made by the majority of authoritative writers on Religion, by whose judgments we seek to be guided.¹

The Sociology of Religion

In the light of the definitions given above, what should be considered as the relationship of Sociology to Religion in such a subject as the Sociology of Religion?

Note first of all that this is the *Sociology of Religion*, and not *Religious Sociology*. We frequently encounter such designations as "Educational" Psychology, "Religious" Sociology, "Agricultural" Chemistry, and the like. We must protest against such misuse of terms whose adjectives imply that there are several brands of the science, of which this is but one. Any science may be related to any field to which its method and content are appropriate, but in every case it is basically the same in character, and its nature does

¹ Let it be noted, however, that the main thesis of this chapter will not be altered by the acceptance of a definition of religion which includes non-theistic philosophies.

not change when it moves from one field to another. The variation is not in the science, but only in the materials with which it deals. There is not one kind of Chemistry for Medicine, and another for Engineering, and another for Agriculture; chemical principles involved are everywhere the same. Similarly, there is not one kind of Sociology for the city, another for the country, another for Education, and another for Religion. The principles of Sociology are the same wherever applied; and only the areas of application differ. So-called "Urban" Sociology, when properly designated, is the Sociology of Urban Life, "Rural" Sociology is the Sociology of Rural Life, "Educational" Sociology is the Sociology of Education.

Therefore, in speaking of the Sociology of Religion, we are simply dealing with Sociology (as defined) applied to the particular field of Religion (as defined). In other words, it is a study of the life of man and his cultural products as affecting and affected by the human associations that are involved in religious matters, as distinguished, for example, from political, or economic, or recreational affairs. The word "Sociology" indicates what body of discipline is being used and what concepts and principles are being employed; the word "Religion" indicates to what field the discipline, concepts, and principles are being applied. Here is a distinction which is simple enough to state, although far-reaching in its implications. If it should be followed, many of the emotional and unscientific treatises on Religion which fortify themselves with the misapplied title of "sociological" would be eliminated.

In giving the three basic definitions which underlie this paper, *viz.*, of Religion, of Sociology, and of The Sociology of Religion, we have by implication given the answer to our introductory question: What is the field and content of the Sociology of Religion? We shall attempt, however, to make our answer explicit.

Our central thesis is that the *Sociology of Religion must be kept in harmony with science*. Religion itself may, and does, go "beyond science," as J. Arthur Thomson expresses it, and expand to reaches where science cannot penetrate, but intellectual integrity requires that our religious beliefs shall not go contrary to the most valid evidence that science gives. Sociology must operate here as elsewhere in accordance with, and within the limits of, whatever scientific knowledge and procedures it has to offer. The three functions of Sociology previously noted define its particular scope: *viz.*,

(1) to describe religious phenomena, (2) to analyze and deduce from this body of data generalizations and propositions of general applicability, and (3) to apply these generalizations to situations where their assistance may be called for.

The Description of Religious Phenomena

As to the first: Accurate *description* is the basis of all science. The primary essential of understanding anywhere is to know what *is*. "What are the facts?" must be the first question advanced in regard to anything that man seeks to interpret. Sociology is concerned with the objective facts of man's behavior when occupied with things religious, exactly as it is with behavior related to other things. It will be concerned, for example, in noting the conditions under which religious emotions and behavior arise or disappear; in observing the numerous concrete ways in which such feelings and actions manifest themselves; in examining the culture manifestations to which they give rise.

But when these are described it must be with the calm objectivity of a photographic reproduction of facts, with no intrusion of evaluative opinion. Dr. P. Sargant Florence of Cambridge, has given an interesting illustration of contrast in this respect:

"In his Biography, the Reverend John G. Paton tells us he 'found the Tannese to be painted savages enveloped in all the superstitions and wickedness of heathenism, . . . exceedingly ignorant, vicious and bigoted, and almost void of natural affection.' Compare the description of the same Tannese by C. B. Humphreys (in his *Southern New Hebrides*). Their superstitions and wickedness in the form of 'myths and traditions,' circumcision ceremonies, initiation dances, and even cannibalism are described without ill feeling, and their clothing—or lack of it—accurately but calmly noted under 'domestic conditions, together with housing conditions, food and its preparation, and recreation.' As for the character of the Tannese, their emotions ('which seem to show a greater similarity to our own than is usually admitted') are 'observed and recorded' whenever any occurrence throws light on the subject. Throughout the book there is no stigmatization."²

After noting the contrast above given, Dr. Florence tersely indicates one of the grave faults still present in much "sociological" description. He says, "The social inquirer today is still in the

² *Sociology and Sin*, 82-83.

shocked missionary stage." It is precisely this "shocked missionary" attitude which Sociology must get rid of if it is to avoid the designations of "sentimental," "sermonizing," and other adjectives which imply judgments upon the materials. There is unlimited room for description of religious phenomena which calls for the deeper insight of sociological observation as contrasted with non-scientific observation, and one of Sociology's chief functions must be to handle that phase.

Analysis and Generalization of Religious Data

As to the second function, Sociology has developed certain methods of inquiry and *analysis* characteristically its own, which are invaluable for complete interpretation. These are related to various typical interest-centers, including the following. *Social control*: What particular techniques of control arise in religious phenomena? What are its devices and instrumentations? What is the part played by suggestion, imitation, coercion? *Social energy (force)*: What motivations predominate? What attitudes? What values? How are they expressed? *Social action*: What characteristic types of interaction appear? of collective action? What elements are found that make for association? for dissociation? What elements that tend to effect integration or disintegration? What tendencies toward socialization? Individualization? *Social relationships*: What part do isolation and its opposite play in religious life? What are their forms? How does religion bear upon the nature and degree of intimacy? of status? of similitude? *Culture*: How does religion influence culture, and vice versa? What are its characteristic folkways? mores? artifacts? mentifacts?

These are but a few of the many questions familiar to the student of Sociology, whose treatment is conspicuously absent in the writings on religion of men who are unfamiliar with current developments in sociological theory.

In science, the larger purpose of analysis of particular cases is to arrive inductively at general propositions. One of the legitimate objects of Sociology, therefore, is that of examining specific religious phenomena as a means to finding conclusions applicable to a wider range. Assisted by Ethnology, Psychology, and other disciplines, Sociology has had a part in doing this. Not only has the univer-

sality of religion itself been substantially demonstrated, but many similarities both of content and of process have been revealed. The extent of this likeness is startling. Frazer, in his *Folklore of the Old Testament*, indicates how the beliefs of Jew and Christian as found in their ancient scriptures, are paralleled among many peoples. For example, he records ten counterparts of the Genesis story of the Tower of Babel, nineteen of the Story of Creation, and more than seventy-five of the Deluge; and these are only three instances of many parallels. Similarly, such practices as prayer, sacrifice, almsgiving, certain methods of worship, temple rituals, and sacraments, to say nothing of basic ethical codes, are found over and over among peoples of a multiplicity of sects. While diffusion (itself a phenomenon for sociological study) will account for a part of this, the deeper explanation resides in the tendency to similarity of human thought and behavior patterns among all peoples, arising from the identity of fundamental mental structure, reacting to kindred experiences.

Sociological interpretation further shows the definite correspondence that exists between particular beliefs and practices, and the circumstances out of which they have arisen. A narrow interpreter of the Protestant Reformation sees it primarily as a struggle over theological tenets; but viewed sociologically it becomes but a phase of the vast political struggle of the Middle Ages. Moreover, its manifestations in different countries definitely reflect the "circumstantial pressures" peculiar to each. Lutheranism in the Teutonic states, Zwinglianism in northern Switzerland and southern Germany, Calvinism in western Switzerland and in Scotland, the Episcopal Church in England, are severally forms of Protestantism poured into a particular socio-politico-religious mould. The various religions which were a part of American colonization from Europe took on forms which reflected the altered social and physical setting of the New World. In like manner, Filipino aspiration for political independence from Spain which culminated thirty-five years ago, carried with it a corresponding demand for an independent national church as well as an independent national government, because of the close interrelationship of the two. Within the past generation, the succession of important political revolutions throughout the world—in China, Mexico, Russia, Germany, Turkey, and elsewhere—have been accompanied by sweeping social modifications as

well, in which the religious life has borne the indelible imprint of the altered attendant circumstances.

Sociology has a great contribution to make to religious understanding, by establishing such facts as these and explaining their correlations. Much of the "higher criticism" which aroused such strong opposition in conservative religious circles a few decades ago, was fundamentally sociological in character in that its interpretations were based upon analysis of the social situations out of which the biblical text arose, rather than upon mere linguistic content of the text itself.

The Application of Sociological Generalizations to Religious Problems

The third function which we have mentioned is that of *application*. Into what situations and problems in which Religion is interested may Sociology properly be called for assistance? We shall mention only four.

The family comes first to mind. The relation of domestic life and religious life has always been peculiarly close. In the early Grecian and other patriarchal forms of society the father was not only the family sovereign in matters governmental and economic, but was also its high priest. Religion among many peoples, as for example, Rome during the period of the Laws of the Twelve Tables, was centralized in the home, and the altar of worship was the family hearth. Even after major phases of religion were transferred to some formal organization outside the circle of the hearth-altar the home still retained responsibility for many phases, including certain religious instruction and the maintenance of religious ideas and ideals. The success of the church today is still dependent upon an effective working relationship with the home. For adequate knowledge of the home, and for guidance in developing that relationship, religion must turn to Sociology, which has made the family one of its objects of special attention.

An enlargement of the family circle brings us to the *community*, a second center of consideration. Organized religion cannot be carried on apart from the life of the community, of which it is an integral part. All the activities of church, or temple, or mosque, must be geared to the community within which they are carried on.

Community study—to which Sociology has been particularly devoted—must provide the foundation for intelligent program planning.

Both family and community are in turn involved in the larger sweep of national and world-wide *social trends*. Religion, like everything else, is carried on in a changing world, and to be effective it must be constantly re-adapted to an ever-altering present. It was not a matter of chance, but of appropriate selection, that President Hoover should have depended so largely upon the sociologists of the nation to interpret, through his inquiry into "Recent Social Trends," the currents of change within our civilization.

The relation of the individual to the group is a fourth, and ever-present consideration, whose understanding is vital for religion. Medieval theology rested upon a medieval psychology which has persisted in certain quarters until today. According to its teaching, salvation consisted of rescuing an individual soul from a literal hell, the escape being dependent upon "conversion," whereby the individual soul "accepted" certain essential articles of faith, turned his face from the ways of the world, and became a re-born creature, and a stranger to his former world, although compelled to remain a member of it. Sociology and Social Psychology have made clear the fallacy of this conception of human transformation. They have shown that "conversion" is a matter of revised attitudes, and that one's attitudes are a product of group life rather than of isolated individual thinking. Salvation, therefore, involves a transformation of the group rather than merely of the sequestered individual; and this necessitates a radical modification of religious strategy and technique.

Space limitations prohibit carrying our illustrations further, although many others are ready at hand. Little elaboration is needed to make clear that the sectarianism which has handicapped Christianity throughout its history is a sociological phenomenon, whose solution is impossible without a comprehension of the sociology of conflict and accommodation. Nor does the inquiring mind have far to look to perceive that the present-day emphasis upon the "social gospel" is but a phase of the slowly dawning socialization, which in one direction takes the form of political democracy, in another that of a broadening humanitarianism, and in still another that of an ideal of universal education. Protestant foreign missions

a century ago combatted heathen darkness with the Bible as the chief, and often the only, weapon of attack; modern missions come by way of the hospital and the schoolroom, as well. And as these paragraphs are being written the pages of the religious press are a-flutter over the indictments of the layman's report on foreign missions, itself a document rich in sociological implications.

Problems of Contact Between Sociology and Religion

To make still more explicit our conception of the relation between Religion and Sociology let us introduce before we close certain secondary questions as to matters which have at various times been brought in under the too-ample designation of "sociological."

Should the Sociology of Religion deal with the supernatural per se? The answer is no. The supernatural is by definition beyond science, hence should not be dealt with by a discipline which confines itself to material considerations. Sociology may be concerned with beliefs in the supernatural in that they are socially created, and in so far as such beliefs condition human association; but questions of the supernatural *per se* lie outside of all science.

Should Sociology deal with religious history? Obviously, the relation between Sociology and religious history is the same as the relation between Sociology and any history. The Sociologist must draw heavily upon the events of the past both to secure a proper background and to supply proper material for analysis. But when Sociology draws upon history, it is not to learn of some particular event that has occurred at a specific time and place. History, as we have pointed out, relates the story of unique events, events that have occurred once and will never occur again. History seeks to portray particular circumstances and occurrences, and to interpret them in the light of their particular setting. Sociology, however, is concerned with formulating generalizations and propositions without reference to their historical location. Sociology, then, must draw upon religious history only for types and norms and trends and principles; it cannot be primarily historical, but must leave that to the religious historian.

Should Sociology deal with questions of theology per se? Again the answer is no. Questions as to the validity of specific creeds and dogmas must be left to the religious apologist and exegete. So-

ciology is no more concerned with theological accuracy than it is with the validity of the nebular hypothesis, or the Newtonian laws of motion. As we have already said, Sociology may be greatly concerned with the explanation of how theological beliefs have arisen, or how once having arisen they have become influences upon human living; but the truth or falsity of creeds themselves are considerations beyond its rightful scope.

Should Sociology enter the lists as a champion of this or that particular faith? Can it at any time become a defender or exponent of one religion as compared with others? Obviously to do so would violate what has already been said in regard to value-judgments. Sociology must not say "good, better, best" with reference to any goal under the sun (although religion is continually obliged to do so). That is a question of philosophical interpretation, and depends upon the particular objectives in question at a given time. If comparative adjectives are used at all, it must be only in the sense that as a means toward an end, whose value it declines to appraise, one measure will be "better"—*i.e.*, more effective—than another. Sociology may say that Mahommedanism is more effective as a missionary faith than Judaism, but it must decline to say whether missionary effectiveness is a good thing in itself. The only point that a science can make and remain scientific is one of showing that under the circumstances "this" will work better than "that" in producing a given result; it oversteps the boundaries of science the moment it undertakes to say whether or not the result is a desirable end.

Does the conception contained in these pages seem to narrow the scope of the Sociology of Religion? If by narrowing we mean to insist that it be confined to scientific channels, we admit that this is so. In that sense, it is a limitation; but it is the identical limitation which we would impose upon Chemistry, or Zoology, or Physics, or Psychology, under kindred circumstances. The aim of any science, we repeat, is (1) to describe, (2) to analyze and interpret, and (3) to make applications within the scope of its findings. Sociology may do the same, no more.

Nothing that has been said above is to be interpreted, however, as preventing the sociologist from free expression of personal religious convictions any more than it would limit the chemist, or the zoologist, or the physicist, or the psychologist in the same respect.

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The restriction indicated does not hinder him from being a loyal member of a religious sect any more than it prevents him from being a devoted member of a political party, or club, or family. But note that in any of these relationships he stands, not as a sociologist or chemist, but as a member of the particular group. Our definition is not intended as a disfranchisement of any individual from voicing any particular interest, but is meant only to make clear the capacity in which he acts when he does express himself.

Sociology has for years suffered disadvantage on account of being identified in many minds with problems of reform and welfare. Not only opponents, but misguided friends, have insisted that its rôle is that of a proponent of measures for human "betterment." At various times both its defenders and its antagonists have confused it with political liberalism, with socialism, and with miscellaneous forms of civic endeavor. To refuse these mantles is not to disparage these other interests, but is merely to insist that Sociology is something else.

At the risk of over repetition, we state once more that Sociology as such does not pass judgment upon the purposes nor the ethics, nor the values of particular associations; it is concerned with *how* we associate, regardless of *why* we do so. The same position must be maintained with regard to the Sociology of Religion, if it is to command the respect of those who demand scientific standards.

BIBLIOGRAPHY

- Bernard, L. L., "Religion and Theology," *Monist*, XXXII:61-88 (Jan., 1922).
- Danforth, R. E., "Religion as a Factor in Human Evolution," *Scientific Monthly*, XX:183-191 (Feb., 1925).
- Durkheim, Emile, *The Elementary Forms of Religious Life*, 1915.
- Ellwood, C. A., *Christianity and Social Science*, 1923.
- *Reconstruction of Religion*, 1922.
- "Sociological View of Christianity," *Biblical World*, LIV:451-457 (Sept., 1920).
- Eubank, Earle Edward, "Religion in Social Experience," *Jl. Applied Sociol.*, X:422-434 (May, 1926).
- Faris, Ellsworth, "The Sect and the Sectarian," *Pub. Amer. Sociol. Society*, XXII:144-158 (1928).
- Fry, C. Luther, "Organized Religion," *Amer. Jl. Sociol.*, XXXV:1042-1052 (May, 1930).

- Gillin, J. L., "A Contribution to the Sociology of Sects," *Amer. Jl. Sociol.*, XVI:236-252 (Sept., 1910).
- Holt, Arthur E., "Social Changes in Religion," *Amer. Jl. Sociol.*, XXXIV:172-177 (July, 1928), 1116-1129 (May, 1929).
- House, F. N., "The Sociology of Religion," *The Range of Social Theory*, 1928, Ch. XVIII.
- Kirkpatrick, Clifford, *Religion and Human Affairs*, 1929.
- Lynd, R. S., and H. M., *Middletown*, 1928, Part V.
- Maurer, H. H., "Studies in the Sociology of Religion," *Amer. Jl. Sociol.*, XXX:257-286, 408-438, 534-550, 665-682; XXXI:39-57, 485-506.
- Mukerjee, Radhakamal, "The Social Conception of Religion," *Sociol. and Social Research*, XIII:517-525 (Aug., 1929).
- Niebuhr, H. R., *Social Sources of Denominationalism*, 1929.
- Sims, N. L., "Religion and the Social Sciences," *World Tomorrow*, XIII:167-169 (Apr., 1930).
- Swift, A. L., Jr., "The Rôle of Religious Institutions and Community Control," *Pub. Amer. Sociol. Society*, XXVI:178-179 (1932).
- Wallis, Louis, *A Sociological Study of the Bible*, 1912.

CHAPTER XIII

CRIMINOLOGY

CRIME has great sociological significance because it furnishes one of the most striking illustrations of the relation between the individual and society and of the perennial conflict between individual and social interests. Criminology is fundamentally a part of the branch of sociology ordinarily called social control. The penal treatment of the criminal is the most drastic form of social repression. The punitive law takes its place alongside of custom, public opinion, moral principles, religious beliefs, magical ideas, and many other forms of social control. The acts penalized by law vary greatly from time to time and from place to place. But at all times and everywhere there exists some sort of a social organization, and the law prohibits those acts which menace it. A crime may, therefore, be defined as an act forbidden and punished by the law, which is almost always immoral according to the prevailing ethical standard, which is usually harmful to society as organized at a given time and place, and whose repression is in the long run necessary or is supposed to be necessary for the preservation of the existing social order.

Criminology is a product of several sciences. Zoology, anthropology, and history contribute to the description of the nature, origin and evolution of crime. Meteorology, geography, demography, and the special social sciences, such as economics and politics, aid in the analysis of the environmental causes of crime. Anatomy, physiology, psychology, and psychiatry furnish the facts and methods for the study of the traits and types of criminals. Comparative jurisprudence deals in part with the penal treatment of crime and the criminal. Upon these varied types of data are based the six principal branches of criminological science, namely, (1) the nature and evolution of crime, (2) criminal sociology, (3) criminal anthropology, (4) criminal psychology, (5) criminal jurisprudence, and (6) penology.

The preceding statement of the field of criminology will be

amplified and illustrated in concrete fashion by the following brief description of its principal problems. Crime originated in violations of customs among primitive peoples, and its evolution may be traced concurrent with the evolution of the state, government and law. Criminogenic factors are found in the physical environment, the demographic conditions, and the economic and political organization of society. Criminal traits and types arise out of the organic and mental bases of criminality. The distribution of criminals with respect to age and sex requires consideration. Criminal jurisprudence includes the study of the development as well as the present status of law and of the mechanism of judicial procedure. Penology involves the study of the origin and evolution of punishment and of the varying conceptions of penal responsibility. These are some of the outstanding problems of criminology.

The ecology of crime may be studied in the influence of the physical environment upon criminal conduct. This influence can be detected in some of its phases more or less directly, in other phases only indirectly. The effect of topography and the nature of the soil probably is of considerable extent, but can be measured only indirectly if at all. The influence of climate, season, and the weather upon criminal conduct can be studied somewhat more directly. This study involves a consideration of the temperature, the variations of heat and cold, the relative length of the days and the nights, the humidity of the atmosphere, and the atmospheric movements in the form of winds. Statistics have accumulated which suggest certain correlations between these telluric conditions and the extent and character of crime.

All social phenomena are influenced by the density and distribution of population. Civilization itself could not have come into being until the human population had attained a relatively high degree of density. The concentration of population in villages, towns and cities is of even greater significance for the study of crime. Urban crime exhibits peculiarities as compared with the crime of rural districts. Increase in the density of population creates new conditions in which more regulations are necessary to harmonize the conduct of individuals with each other. This situation becomes especially acute when the population is highly concentrated and congested as in a large city. A comparative study of urban

and rural conditions involves an extensive research of the demographic factors in the causation of crime.

Like every animal species mankind is engaged in a struggle for existence. This is true both of the human species as a whole and of individual human beings. The human struggle for existence has become in large part an economic struggle, that is to say, a struggle to obtain the commodities needed and desired within a system of production based upon the division of labor and exchange. This struggle, though it becomes more complex and indirect in its character, is no less bitter than it is among many animal species, and is as all-pervasive. It touches upon and influences every important aspect of mankind. It is of special significance with respect to criminal activity, because much of this activity arises directly out of the economic struggle, while most of it is conditioned by the economic environment.

The criminality of any time and place is conditioned and to a considerable extent determined by the existing economic system. Where the methods of production are not highly developed, so that the wealth of the community is limited, the living conditions will be of the rude sort which are likely to encourage crimes against the person. As the methods of production become more complex and wealth increases, more crimes against property become possible.

In attempting to ascertain and measure the direct and immediate influence of economic forces upon criminality, several methods may be used. Fluctuations in the amount of crime may be correlated with economic changes. The economic crimes or crimes in which economic motives are obviously or apparently predominant may be distinguished and segregated from the crimes in which the economic factor plays a smaller part. The economic status of criminals, namely, the classes with respect to the distribution of wealth and the occupations to which they belong, may be studied. Professional criminality or the criminality of those who make of crime a profession and occupation may be studied. In connection with these methods of studying the problem various economic phenomena and conditions, such as the extreme variations in the distribution of wealth, the pressure due to poverty leading to criminal acts in order to avoid starvation or to secure a higher standard of living, unemployment, low wages, mendicancy, vagrancy and other forms of depend-

ency giving rise to crime, should be studied. In fact, the analysis of the economic factors in the causation of crime is perhaps the most extensive and complicated problem in the field of criminology.

The political organization of society is determined in large part by the economic organization. But the form of government and the nature of the laws promulgated and enforced have some effect in turn upon economic and other social conditions. The answer to a question as to the extent to which these conditions can be influenced by the government, and consequently the extent to which criminal conduct can be attributed to government, depends in part upon the theory of the functions of government held. There are many of these theories ranging from the extremely individualistic theories of the *laissez faire* philosophers, through the social welfare theories, to the socialistic theories. These theories cannot be discussed here. But there are certain ways in which government is a more or less direct cause of crime.

A government may give rise to crime because it is ineffectively organized, or because, even though well organized, it is inefficiently administered. Its effectiveness depends in large part upon the place and time in which it exists. A form of government which is well suited for a barbarous people may be very unsuitable for a highly civilized people. Hence it is impossible to generalize with respect to the form of government. In similar fashion, the efficiency of the administration will depend in part upon the place and time.

The law has usually been unscientific because it has not been based upon scientific knowledge as to the cause of crime and the traits of the criminal. This knowledge can be used so as to render much more effective both the suppression and the prevention of crime. Governments have usually failed to gather and make use of statistics which are of great value in measuring the effects of the different kinds of penal treatment, as well as by throwing much light upon the causes and conditions of crime.

While the economic and political factors are perhaps the most important in the causation of crime, there are other aspects of culture which require study. Among these are religion, art, recreation, the press, and education. The influence of these factors is in the main indirect. It requires a complicated technique of investigation which has for the most part not yet been worked out.

Turning now from the criminogenic factors in the physical and

social environment, the most important problems of criminology are in the study of the traits and types of the criminals themselves. The organic basis of criminality is to be found in the anatomical and physiological traits of the criminal. While the earlier theories of the born criminal and of the instinctive criminal were not sound, certain hereditary traits predispose their subjects to certain kinds of criminal conduct. The organic traits and processes are, therefore, of fundamental importance in the causation of criminality. While there is no evidence of a congenital type predestined from birth to become a criminal, there are a good many individuals with congenital traits which under favorable circumstances are likely to give rise to criminal conduct.

The mental basis of criminality is to be found in part in certain types of mental abnormality. Among these are amentia, dementia, insanity, the neuroses, and alcoholism, drug habits, etc., due to abnormal appetites. Amentia is due to subnormal cerebral development. Dementia is due to cerebral dissolution after the brain has developed. Insanity is a derangement of thinking and of conduct due to a pathological state of the nervous system which may degenerate and give rise to dementia. The neuroses are more or less general neuropathic states which may or may not accompany the abnormal mental states which have so far been mentioned. Four major neuroses have usually been distinguished, namely, epilepsy, neurasthenia, hysteria, and psychasthenia, each of which may under certain conditions and in various ways lead to criminal conduct. An abnormal habit is not in itself a mental disease, nor does it necessarily indicate the presence of such a disease. A person may acquire an abnormal habit as a result of environmental influences, without having a previous morbid basis. But after the habit is acquired, it is very likely to cause a pathological neural condition, which in turn gives rise to a mental disease.

At all times and places many of the criminals are persons who are not well adapted to their social environment because they cannot adjust themselves to the existing customs, standards, etc., of society. Some of these individuals cannot adapt themselves to the existing social order, but might be able to adjust themselves to another kind of society. Other criminals are incapable of adapting themselves to any kind of a social system, thus constituting a universal type of criminal.

There are various reasons for the lack of social adaptability of the individuals belonging to this universal criminal type. It is determined immediately by the mental traits of the individual. But many different combinations of mental traits lead to this lack of adaptability, and it is often difficult to analyze the combination in a specific case. There are those who cannot adapt themselves to the existing social régime because they believe it to be wrong, but who probably could not adapt themselves to any kind of social order. A person may become criminal because of abnormal features in his instinctive makeup. This happens because certain instincts are unusually strong, or because they are exceptionally weak. For example, if the pugnacious tendency is abnormally strong, it may lead to acts of violence. Or if the parental impulses are weak, it may lead to neglect of offspring. In similar fashion, a person may become criminal because of abnormal features in his affective makeup. For example, if the feelings relating to reproduction, sex, and the like, are excessively strong, they may lead to crimes of passion. If they are unusually weak, their subject will lack sympathetic feelings and will not be inhibited from inflicting pain upon others. The situation with respect to intelligence is somewhat different. The intellect has no moral significance in itself. But a strong intelligence is not likely to be associated with these abnormalities of the impulsive and affective traits. It is able to comprehend social standards and their justification. A weak intelligence, on the contrary, is likely to be associated with these affective and impulsive abnormalities, and finds it difficult to comprehend social standards and their justification.

At the same time, it must be remembered that the difference between these criminals and mankind in general is only one of degree. No person can become perfectly adapted to the social system under which he lives. Every one violates moral, legal, and social conventions to a certain extent, and each person is in some degree abnormal and pathological. This failure to become entirely adjusted is not due wholly to individual traits but in part to the social system, because no social system can be so delicately organized as to obviate all maladjustment. However, most individuals acquire sufficient knowledge and develop enough self control to enable them to get along fairly well with their fellows, and to avoid violations of social conventions so flagrant in their nature as to

bring upon them severe penalties. The majority of those who commit criminal acts are normal or almost normal. In fact, nearly every person is destined at one time or another to commit criminal acts, but the great majority are not caught at it. Most of those who are caught belong to the occasional and professional classes of criminals, which include the vast majority of the total criminal population.

The following classification of criminal types is suggestive as to the range from the abnormal to the normal.

1. The criminal ament or feebleminded criminal.
2. The psychopathic criminal.
3. The professional criminal.
4. The occasional criminal.
 - a. The accidental criminal.
 - b. The criminal by passion.
5. The evolutive criminal.
 - a. The political criminal.

The first two types of criminals have been briefly described above. The third class includes all criminals who are not feebleminded or psychopathic, but who commit crimes repeatedly and who support themselves entirely or in part by means of their criminal activities. There is a certain amount of diversity within this class of criminals. They vary from the intelligent, expert professionals, who reap large profits from their criminal careers, to the repeated petty offenders, who eke out a precarious existence with their petty crimes, but who are too stupid and weak by birth or as a result of their experience to commit more profitable crimes. They vary from those who, though not feebleminded or psychopathic, possess abnormal or pathological mental traits which have led them into a criminal career, to those who are entirely normal, but who have been led into crime by their training and circumstances. They vary from those who have deliberately chosen a criminal career, who are the only ones recognized by some criminologists as professionals, to those who have drifted into it largely through the force of circumstances and with little or no choice of their own.

The class of occasional criminals also comprises a considerable variety of criminals. It includes all those who under the pressure of unusual circumstances, and sometimes also in part owing to

slightly abnormal or pathological mental traits, commit one or a very few crimes in the course of a lifetime. However, it also includes a good many persons who will eventually become professional criminals. The accidental criminals are led to commit crimes under peculiar circumstances and almost through no choice of their own. The criminal by passion is not feeble-minded or psychopathic, but may possess a somewhat excitable temperament. Such a person may commit a crime, usually a crime against the person, under the pressure of unusual circumstances and under the influence of the passion aroused by those circumstances, whereas he could not be induced to commit a criminal act under almost any other circumstances.

The description of the principal criminal types is one of the major problems of criminology which has so far been little studied. Closely related to it is the question of the size of the criminal population and its distribution among the criminal types. In the criminal population should be included those who at a given time and place menace society with anti-social acts which the law has forbidden. Among them are the feeble-minded and psychopathic criminals, the professional criminals, and the occasional criminals of the moment, that is to say, those who have committed crimes by accident, occasion, and passion within the very recent past, as, for example, during the preceding years. Those who have committed criminal acts in the more distant past, but are not likely to commit any more crimes, cannot be said to menace society, and should therefore not be included in the criminal population.

The distribution of criminals according to age and according to sex is of great criminological significance. The criminal traits of the young are of interest and importance not only for their own sake, but also on account of the light their study throws upon the corresponding traits of adults. Many criminal careers begin in childhood or early youth. Even when a criminal career begins after maturity has been attained, the experiences and influences of early youth are often of great significance for explaining the later criminality. Consequently, the study of juvenile criminality is in large part a contribution to the study of adult criminality as well.

Several traits peculiar to childhood and early youth are of significance in this connection. The child is subjected to the strain of

growth which uses up much of his energy. The sexual impulses and feelings are almost entirely lacking during childhood. At the time of puberty comes a crisis due to the great changes caused by the awakening of the sexual nature, and throughout the period of adolescence, while the sexual nature is coming to full maturity, there is much instability of mind and character. The child commences life in total ignorance and without moral discipline, and acquires knowledge and moral character to the extent that his congenital traits and the environment permit of such acquisition.

Owing to the physical strain of growth, puberty, and adolescence, even the healthy young person may temporarily be in a somewhat abnormal and pathological state, which in some cases may lead to criminal conduct, but will later pass on to a normal and healthy adulthood. If, however, the child has inherited any congenital weakness, he is much more likely to develop abnormal and pathological traits which will remain with him throughout life. These traits of childhood and early youth, therefore, may or may not prove to be adult traits as well. In other cases criminal conduct on the part of children may be due solely to ignorance and lack of suitable guidance.

While juvenile criminality differs from adult criminality in some of its features, juvenile and adult criminality are similar in many of their traits, probably in most of them. In fact, the juvenile delinquent often is the prototype of the adult criminal. Consequently, most of the data concerning criminality in general apply to the young as well as to adults.

According to the available judicial and penal statistics of crime, there is from four to six times as much male criminality as there is female criminality. These statistics indicate that in abortion; certain crimes against children, such as infanticide, abandonment, kidnapping, cruelty, etc.; procuration; and in some forms of receiving stolen goods; female criminality exceeds male criminality. Abortion and her crimes against children are due to the functions of woman in bearing and rearing children, procuration is due to her activities as a prostitute and as an exploiter of prostitutes, and receiving stolen goods is due to her activities as an accomplice of criminals.

More detailed analyses of criminal statistics have revealed the fact that women commit poisoning more often than men, this

being an easy way for them to commit murder. It is probable also that they commit such crimes as vitriol throwing more often than men, owing to jealousy; and make false accusations more frequently, perhaps owing to their hysterical tendencies. These false accusations are usually of sexual attacks upon them by men.

These statistics also indicate that women commit relatively few crimes of violence, owing largely to their physical weakness. Partly for the same reason they commit few of the sexual crimes, though this may be due also in part to their more passive sexual nature. They commit few of the higher types of crime, such as forgery, embezzlement, counterfeiting money, etc., mainly because women do not play an important part in the business and professional worlds.

Female criminality tends towards crimes against property rather than towards crimes against the person and violent crimes. It begins later than male criminality, probably in the main because girls are kept in the home and watched over more carefully than boys. Female criminals may, however, be more incorrigible, probably in part because the social reinstatement of the female criminal is more difficult than that of the male criminal.

In attempting to explain the apparently lower criminality of women as compared with men, several factors must be studied. Woman's inferiority in physical strength shuts her out almost entirely from many kinds of crime requiring great physical strength, such as burglary, highway robbery, certain forms of murder, etc. The relatively passive rôle of the female in sexual intercourse renders it impossible for her to commit certain kinds of sexual crimes, such as rape.

Woman is favored in the repression and treatment of crime, thus lowering somewhat the statistics of her criminality. The victims of female criminals are not so likely to complain against them as they would be to complain against male criminals. The apprehended female criminal is often not prosecuted so vigorously as the male criminal. When brought to trial she is more likely to be acquitted. Men, though stern towards culprits of their own sex, are liable to display sentimental leniency towards the female criminal. Even when convicted she is less likely to be sent to prison, because judges usually try to avoid sending a woman to prison and to deal with her more leniently.

Women obtain much fewer opportunities to commit crimes than men. Their sphere of activities has usually been within the home, more or less secluded from the outer world. Up to the present time they have taken little part in the economic occupations and the professions outside of the home. They have not been subjected to the same extent as men to the bitter economic struggle for existence, which has been borne for them in part by the men. Occupied in the home with their household and maternal duties, they have been shielded from many temptations to commit crimes in the course of economic activities, from many inciting influences, and to a large extent from alcoholic stimulation.

As woman's position becomes more like that of man, her criminality increases. The available statistics indicate that in the more civilized countries where women have entered the occupations and professions outside of the home to a considerable extent, so that their social position has become more like that of men, female criminality is much higher than in the less civilized countries where woman is still secluded in the home. They indicate that her criminality is rapidly increasing as she is attaining a greater degree of economic independence. This does not mean necessarily that her criminality will ever approximate that of man, because there will always remain the innate physical and mental differences between the sexes which tend to depress the relative criminality of woman.

The apparently lower criminality of women is explained in part by the fact that there are many more extra-judicial female than male crimes. That is to say, there are many more crimes committed by women which are not recorded in the judicial statistics than there are of unrecorded crimes committed by men. This is partly due to the favoritism shown to women. But it is due principally to the fact that female crimes are more difficult to discover than male crimes. A much higher percentage of female than of male crimes are crimes of complicity, which are not so readily detected as crimes which are committed overtly. Many a male criminal is being aided by a female accomplice who remains in the background. The judicial statistics reveal a large number of female receivers of stolen goods. Furthermore, many a man is instigated to commit a crime by a woman, even though she may not become guilty of complicity in the technical sense.

However, it is doubtful if woman's criminality equals that of man, even when her extra-judicial crimes are included. On account of her innate traits and her social position, her anti-social tendencies are more likely to take a form which is not criminal. There is reason to believe that women excel men in deceitfulness, lying, hypocrisy, malicious gossip, backbiting, slander, nagging, etc., and that they possess a weaker sense of social solidarity and of justice. Some of these traits are not even called vices ordinarily, to say nothing of not being crimes. So that while women are preserved from a certain amount of crime by their secluded manner of living, they do not acquire the broader outlook upon life which would save them from some of the anti-social conduct mentioned above.

Criminal jurisprudence has usually been studied by lawyers and political scientists. As the law is one of the principal forms of social control, it has great sociological significance. The sociological study of criminal jurisprudence falls within the field of criminology. The study of civil jurisprudence also has some criminological significance.

In the early stages of cultural evolution many acts regarded as injurious were punished by private vengeance, usually with the approval of the community. Most of these acts later became either public or private wrongs under the law. The acts which were regarded as harmful to the whole community became crimes or public wrongs, to be punished under the criminal law; while the acts which were regarded as being harmful only to individuals became torts or private wrongs, to be redressed under the civil law. It has usually been assumed that no questions of moral turpitude are involved in torts. There has always been more or less shifting of wrongs back and forth between the criminal and the civil law, so that an act which is at one time regarded as a private wrong is at another time regarded as a public wrong and *vice versa*.

After criminal law came into existence it became necessary to devise a mechanism for applying it. To attain this end two things must be accomplished, namely, to determine that a crime has been committed, and to ascertain who committed it. Criminal procedure has evolved for the purpose of performing these functions, and operates through courts and judges. The purpose of a criminal trial is to gather, examine, and weigh evidence. Consequently, the

larger part of the mechanism of criminal procedure is devoted to this work, and the subject of central importance in the study of the rules of procedure is evidence.

Penology has been much concerned with theories as to the sanctions for punishment and as to the basis of penal responsibility. One of the earliest justifications for social control was religious. This justification assumed that penalties must be inflicted for violations of the divine law. The religious sanction for penal treatment is punitive and expiatory in the sense that this treatment is a punishment and retribution for sin. Later came the moral sanction for punishment, based upon a belief in a moral law, which is reparatory and exemplary in the sense that penal treatment makes good in a measure the breach which criminal conduct has caused in the moral law. In recent times the theory that society must be defended against conduct which is or is supposed to be injurious to it has acquired more influence. The social sanction for punishment is deterrent and preventive in the sense that penal treatment is for the protection and improvement of society, and not to make good an injury which has already been committed and which can be obliterated only in part if at all.

The theories of penal responsibility have ranged from the theories based upon the free will of the individual through the theories of partial individual responsibility to the deterministic theories. In accordance with the free will theories it has been the tendency to adjust penal treatment to the nature of the criminal act committed. In recent times the principle of the individualization of punishment, according to which the penalty is adjusted to the character of the criminal, has been acquiring a great deal of influence. This principle recognizes that the character of the individual is determined in large part by forces external to himself, and that society can be more effectively protected against anti-social conduct by changing the character of the criminal than by merely punishing his criminal acts. The penalties which have been inflicted have to be studied in the light of these varying and to a certain extent conflicting theories of penal responsibility and of sanctions for punishment.

Crime as a social phenomenon will continue to change as long as society changes. These changes will be both in the nature and extent of crime, and also in the ways in which society reacts against

criminal conduct. New social conditions create new occasions for conflict between individual interests, while obsolete causes of conflict disappear with changing conditions. The increase or decrease of crime depends upon the proportion between the new and the old causes of crime. The continual shifting of ethical standards will always be adding new forms of conduct to the list of crimes, and at the same time removing other forms of conduct from the penal code. Like every other branch of sociology, criminology is subject to a continual variation in its field and shifting of emphasis in its problems.

BIBLIOGRAPHY

- Aschaffenburg, G., *Crime and Its Repression*, 1913.
 Best, H., *Crime and the Criminal Law in the United States*, 1930.
 Bongers, W., *Criminality and Economic Conditions*, 1916.
 Cantor, N. F., *Crime, Criminals and Criminal Justice*, 1932.
 Dexter, E. G., *Weather Influences*, 1904.
 Ellis, H., *The Criminal*, 1903.
 Ferri, E., *Criminal Sociology*, 1917.
 Garofalo, R., *Criminology*, 1914.
 Gillin, J. L., *Criminology and Penology*, 1926.
 ———, *Taming the Criminal*, 1931.
 Glueck, S. and E. T., *500 Criminal Careers*, 1930.
 Hall, A. C., *Crime In Its Relation to Social Progress*, 1902.
 Healy, W., *The Individual Delinquent*, 1915.
 Healy, W., and Bronner, A. F., *Delinquents and Criminals*, 1926.
 Haynes, F. E., *Criminology*, 1930.
 Ives, G., *A History of Penal Methods*, 1914.
 Lombroso, C., *Crime, Its Causes and Remedies*, 1911.
 McConnell, R. M., *Criminal Responsibility and Social Constraint*, 1912.
 Parmelee, M., *The Principles of Anthropology and Sociology in Their Relations to Criminal Procedure*, 1908.
 ———, *Criminology*, 1918.
 Parsons, P. A., *Crime and the Criminal*, 1926.
 Saleilles, R., *The Individualization of Punishment*, 1911.
 Sutherland, E. H., *Criminology*, 1924.
 Tarde, G., *Penal Philosophy*, 1912.

CHAPTER XIV

FAMILY STUDY

IT is perhaps a truism to say that the economic, social, scientific and religious revolutions of the last century have rendered the functioning of the family under modern conditions increasingly difficult, yet this fact with all its implications is not always fully grasped. Despite a challenging array of family problems and difficulties crying aloud for solution, sociology has been astonishingly tardy in entering the field of research and even now investigators are at odds regarding questions of methodology. The problems of the contemporary family may be broadly classified into (1) those which grow out of family relationships, the intimate give and take of family life, and (2) the difficulties which have their source in societal conditions to which the family is related. Obviously these problems are not sharply distinguished in fact but for convenience may be thus logically classified.

The Primitive and the Historical Family

Before considering the problems of the modern family which challenge research, a glance may be cast at the fields of the primitive family and of the family in ancient and medieval times. The pioneer work of the early ethnographers, Bachofen, McLennan, and Westermarck¹ has been followed by the recent researches of Malinowski,² Mead³ and others in the family structure and life of pre-literate peoples in Melanesia, Samoa and New Guinea. Further comprehensive investigations of primitive societies are needed to enlighten the sociologist concerning the variety, the complexity and (not rarely) the suitability of family customs in uncivilized groups, from which advanced societies have emerged. Likewise more his-

¹ Westermarck, E. A., *History of Human Marriage*, 3 vols., 1901.

² Malinowski, B., *The Sexual Life of Savages in North-Western Melanesia*, 2 vols., 1929.

³ Mead, Margaret, *Coming of Age in Samoa*, 1928.

torical research in the evolution of medieval family laws and customs, in each country of western Europe is essential. No such detailed family histories, based upon an existent rich mine of medieval source writings, now exists. Similarly, histories of the legal, social and economic development of the family in England, Germany, France, and Scandinavia—to mention but a few countries—from the Renaissance to the present should be written in accord with the most exacting standards of historical research. Finally, studies are needed of changing family law and custom in those lands of revolutionary change—Soviet Russia, Turkey, Spain, China and Japan.

Socio-Economic Factors Influencing Marriage and the Family

Among the many questions concerned with marriage under modern social conditions a few may be mentioned as suitable for research: (1) the marriage rate, is it rising or falling? (2) factors of choice in marriage; (3) prediction of successful adjustment in marriage; (4) differential age at marriage as related to social class; (5) the effect of urban life in promoting or hindering marriage among educated groups. The census figures for 1930 show a slightly higher marriage rate among males and females fifteen years of age and over than in 1920 and the rate has risen steadily since 1890. Yet the marriage rate in 1930 was only 9.20 as compared with 10.14 in 1929. This decrease may easily be explained as the result of adverse economics conditions. But in view of the fact that the prosperous years 1924, 1927 and 1928 showed decreases in the percentage of those married over the preceding years, a research in the marriage rates for the decade 1922-1932 inclusive, based on the annual census reports on *Marriage and Divorce* seems highly desirable. Is the craving for marriage and family life weakening in the conditions of our modern age?

Little is known of the factors of choice in marriage that influence young persons at present. A better understanding of these factors, including the part played by early home influences, social status, education, recreation and religious affiliation, seems important in view of the more general acceptance of the theory that pre-marital education is greatly needed in modern societies. In urban centers occupational propinquity has been demonstrated to play a leading

rôle in marital choices. More recently Bossard's investigation of residential propinquity,⁴ based on a study of 5,000 consecutive marriage licenses issued in Philadelphia, reveals the fact that one-third of the licenses were granted to applicants living five blocks or less from each other.

What are the elements making for successful adjustment in marriage? Until recently almost the only study was that made by Chase Going Woodhouse of 250 families deemed successful by acquaintances and friends because the individual members were well adjusted in their personal lives and doing good work in their particular jobs. More comprehensive research in this problem is greatly needed to work out criteria of successful family life and a reliable methodology of investigation. Already the question is being raised: Have we not enough data at hand to attempt prognosis of happiness in marriage?⁵ Investigations of marriage in recent years have tended to focus on sexual and personal relationships with their attendant satisfactions and frustrations.⁶

The opinion has long been held that the more privileged social classes tend to marry later in life than the low income groups, and the theory is abundantly supported by a statistical study of *Differential Age at Marriage according to Social Class* made by Notestein for the Research Division of the Milbank Memorial Fund. Notestein has shown that, whereas only 8.5 per cent of the professional class and 18.6 percent of the proprietary class married between the ages of fifteen and nineteen years, 42 per cent of the women of the urban unskilled laborer class and 52.3 per cent of those of the farm laborer class married within those ages. Obviously this fact has a bearing on the differential birth rates of these classes and the question merits further investigation, making use of census figures of 1930.

Social writers interested in eugenics have frequently called atten-

⁴ Bossard, J. H. S., "Residential Propinquity as a Factor in Marriage," *Amer. J. Sociol.*, XXXVIII:219-224 (Sept., 1932).

⁵ Professors E. W. Burgess and L. S. Cottrell, Jr., of the University of Chicago are even now engaged in a study of *Prediction in Marriage*. At the annual meeting of the American Sociological Society in December, 1932, Jessie Bernard presented a highly suggestive paper treating of the possibility of working out an accurate instrument for measuring adjustment in marriage.

⁶ Hamilton, Dr. G. V., *A Research in Marriage*, 1929; Davis, Katherine B., *Factors in the Sex Life of Twenty-two Hundred Women*, 1929; Dickinson, Dr. Robert, and Beam, Lura, *A Thousand Marriages*, 1931.

tion to the fact that educated young people, earning their living in cities remote from their childhood homes, frequently fail to meet congenial persons of the opposite sex and live lives of too much social isolation. This raises the question: Is city life in our modern age making inter-sex acquaintance, especially of the educated group, too difficult to further the end of marriage? Conversely much is heard of free sexual experimentation in cities among youths of both sexes. Will this prove an aid or a handicap to permanent marriage? It can hardly be doubted that the old moral codes regulating the sexual relations of young people in the past have been sharply challenged by modern youth, if not in part thrown into the discard. Unquestionably youth is trying out new forms of sexual union—the companionate or “trial marriage,” which is no marriage, but an irregular sexual relationship with a view to subsequent conventional marriage if it proves successful, and free sexual unions with the purpose of securing “sexual experience.” It seems deplorable that while youth is, perhaps, working out a new moral code, maturity stands helplessly by, effectually prevented by a Puritanical social *tabu* from discovering what form the new ideas are taking or how much experimentation is going on. At our hand are colleges, young people’s clubs and organizations and the Young Men’s and Young Women’s Christian Association which are potential laboratories of research. But society, still strikingly Victorian, scotches any thorough investigation of this problem, with the result that social writers do not know whether the so-called “new freedom” and “new morality” represent merely a temporary revolt of youth, already ebbing, or a permanent trend with profound effects upon marriage and family life.

Family Problems and Research in the Family

Family Organization and Patterns. One of the questions that should serve as a challenge to social investigators is the degree to which the patriarchal family type persists among foreign-born and native groups in America. In a recent study of eighty farm families, Sanderson and Foster⁷ classified their families into two patterns, one in which the father’s authority was dominant and

⁷ Sanderson, E. D., and Foster, R. G., “A Sociological Case Study of Farm Families,” *Pub. Amer. Sociol. Society* XXIV:266-267 (May, 1930).

one in which control was jointly exercised by both parents. More extensive research in this field is needed, not only in rural areas, but in urban localities. Such intensive studies of families as organic groups would enable sociologists to classify families according to certain patterns. Professor Mowrer has done this for the city of Chicago in his recently published book *The Family*.⁸ Mowrer found four types of families inhabiting different areas in Chicago: first, "emancipated" families of free-thinking (and acting) folk; second, "paternal" families in the tenement sections and immigrant colonies, where the father's will is law; third, "equalitarian" families in which control of household and children is shared by husband and wife; fourth, "maternal" families, in the outlying districts inhabited by commuters, where the mother assumes authority in the absence of the father in the city. Similar studies of families in selected areas, urban or rural, would represent a much needed contribution to our knowledge of family patterns and relationships.

Housing as a Family Problem. The indifference or passivity of the American public in general and of sociologists in particular to the problem of the decent housing of low income groups has been an important factor in the maintenance of slum areas in our cities that are a definite blight upon family life. Years ago Edith Elmer Wood, veteran research worker in this field declared that, roughly speaking, "one-third of the people of the United States are living under subnormal (housing) conditions, conditions which fall below the minimum standard . . . and about a tenth are living under conditions which are an acute menace to health, morals and family life. . . ."⁹ It has long been recognized that slum tenements and slum neighborhoods are fertile breeding places of bad homes, of family friction and disorganization, family ill health, juvenile delinquency and prostitution both of which are correlated with poverty and wretched homes. Yet no determined and persistent efforts, backed by community sentiment, have yet been made in America to wipe out our shameful slums. The Report of the President's Conference on Home Building and Home Ownership contains a section on *Slums, Large-Scale Hous-*

⁸ Mowrer, E. R., *The Family*, 1932.

⁹ Wood, Edith Elmer, *The Housing of the Unskilled Wage Earner*, 1919, p. 1. (Reprinted by permission of the publishers, The Macmillan Co., New York).

ing and Decentralization that has just been published. As a result of an exhaustive study of more than 3,000 American homes in forty states, the conference included in its findings, published in Volume X, the conclusion that badly planned homes and inefficient housing are responsible for many of the troubles and much of the impairment of family life in the United States. Here is a fertile field of investigation, not only in cities but in small towns and rural areas. The investigations should not be merely objective and factual but designed to result in an aroused public opinion and a willingness to experiment with model housing under public auspices, a policy long in use in Europe.

Family Vicariates or Substitutes. An unmistakable trend in America is toward the increasing use of family substitutes or vicariates. Disorganized or broken families, together with illegitimacy, provide conditions which require the placing of young children in institutions and in foster homes. Owing to the inadequate wages paid to unskilled laborers, mothers have been forced to engage in paid labor outside their homes. This situation has led to the establishment of day nurseries to care for their youngest children. But family vicariates are not confined to the poor. Nursery schools for the well-to-do have sprung up over the length and breadth of America which afford expert physical care and mental and moral guidance to young children just able to toddle, thus relieving parents of a considerable portion of their care.

With respect to socially handicapped and dependent children, there is a powerful trend in the United States toward acceptance by the state of responsibility for the welfare and training of this army of youth. Thirty states and the District of Columbia have assumed some degree of direct care of these children. The tendency is strongly in the direction of placement in foster homes and boarding homes rather than in state, county or local institutions, since public opinion, as voiced by physicians and welfare agencies, is convinced that this policy conduces to the best development of socially dependent children. Yet, so far as the writer is aware, no authoritative research has been made of the physical growth, social impulses and habits, moral standards and intellectual development of a considerable group of children reared in institutions when compared with a comparable group of children under home care. This problem is offered as a serious one for investigation, espe-

cially in view of the public advocacy of institutional upbringing of children so light-heartedly voiced by Bertrand Russell and his followers, together with the strong movement toward institutional rearing of children in Soviet Russia.

Problems of the Birth Rate and Differential Fertility. As everyone knows, the social trend in the direction of the small family system is proceeding apace. In almost every country birth rates are tumbling, assisted by the economic chaos of the last three years. Preliminary figures for 1931 show a birth rate in the registration area of the United States (46 states) of 17.8 as compared with 18.9 in 1930—a sharp fall which, when viewed from the standpoint of the steady decline of the last decade, seems to indicate unmistakably that the laboring class is employing contraceptive methods. This inference is borne out by recent European studies showing phenomenally low birth rates—as low as 11.6 in Berlin in 1925—in the cities of Oslo, Prague, Stockholm, Vienna and Berlin. These low birth rates suggest the problem: Is modern urban and industrial life in itself a dysgenic influence? Notestein has shown¹⁰ that in rural areas “only 385 married women of standard age distribution were required for the birth of 1,000 children, while in the city 625 were needed.” Other investigations of this question, based on data contained in the Census of 1930, would throw light on the rate of decline of the rural birth rate in the last two decades and also assist in solving the problem concerning a possible dysgenic influence in urban life *per se*. Closely associated with the last question is the following: Is there a natural decrease in fecundity with the advance of civilization? Little or no research in this problem has been attempted. However, Notestein examined the trend of the birth rates by age at marriage for the “upper classes” and discovered that they were lowest for the youngest marriages but rapidly approximated the birth rates for the unskilled laboring class after the wife was twenty-five years of age. This discovery, in the words of the investigator, “lends little support to the theory that the low birth rate in these classes [business and professional] is explained by an inability to reproduce rapidly and suggests strongly that conception is increasingly subject to voluntary control as social status rises.” Here is a problem of the greatest social

¹⁰ Notestein, Frank, “The Decrease in the Size of Families from 1890 to 1910,” *Quart. Bull. of the Milbank Memorial Fund*, IX:181-188 (Oct., 1931).

concern which suggests research, making use of the more recent data of the 1930 census.

Another question of primary importance is that of childless families and sterility in marriage. Using data contained in the Census of 1920, Lotka discovered that the gross childlessness of American women is 17.1 per cent; but when allowance is made for the premature death of the wife or the husband and for marriages ending in divorce the percentage falls to 13.1. A study of childless marriages based on recent census data is greatly needed. Is childlessness in marriage increasing?

One of the most thorough studies of differential fertility in the various social classes has been made by Sydenstricker and Notestein.¹¹ As was to be expected they found the highest birth rates in the unskilled laborer class. But more surprising is the finding that there "is no evidence that persons of higher economic status had characteristically different birth rates from those of the lower economic status *in the same social classes*."¹² Clearly these conclusions should point to more precisely controlled researches, as the investigators themselves suggest.

The Family and the Economic System

Social welfare agencies are collecting a vast array of facts concerning the effects of unemployment and the ever-present sense of economic insecurity upon the family and family relationships. In an unpublished study Joanna Colcord has shown the incidence of the economic depression on the family and its effects in lowered standards of living, malnutrition, borrowing, consumption of family savings, foreclosures with total loss of homes by families who had for years paid for them on the installment plan, and the piling up of debts. These gloomy accumulations of facts furnish data for a searching statistical investigation of the cost of the current depression to the American family—economically and spiritually.

The trend toward the employment of women in industry, business and the professions is increasing in strength, as shown in the Federal Census of 1930. Among the more than 10,600,000

¹¹ Sydenstricker, E., and Notestein, Frank, "Differential Fertility according to Social Class," *Jl. Amer. Statistical Assn.*, XXV:9-32 (Mar., 1930).

¹² *Italics mine.*

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women 15 years of age and over who are gainfully employed, 28.9 per cent are married. This represents an increase since 1920 of 5.9 per cent or, in round numbers 1,150,000. The question obtrudes itself at this point: What is the effect of this wholesale employment of wives and mothers upon home management, child care and family relationships? Studies of this problem in the case of mothers of the laboring class have been made by Helen Wright, for the Children's Bureau,¹³ and by Gwendolyn Hughes,¹⁴ who investigated 728 gainfully employed mothers in Philadelphia. Both investigators pointed out that the neglect of children of pre-school age and over was one of the most undesirable conditions disclosed. Wright emphasized also the fatigue and ill-health of many mothers consequent upon overwork in the attempt to shoulder two jobs. This investigator does not hesitate to throw the responsibility for the undesirable conditions she uncovered squarely upon the shoulders of the public, and urges social experiments with houses built around a central kitchen, provision of cooked food and laundry service and "community kitchens." Further research among the employed mothers of the professional and business groups is needed, since the few investigations in this field have been limited in scope and inconclusive.

Public Aid to Families. The crucial economic problems of a large proportion of families in our present industrial order have given rise to significant forms of public aid to mothers and children designed to enable the family to carry on as a unit. The movement has proceeded farther in Europe than in *laissez-faire* America, where the only kind of public aid now provided takes the form of grants to needy mothers whose husbands are dead or incapacitated. Until a few years ago the United States Government made grants to states, under conditions laid down in the Sheppard-Towner Act, for the purpose of promoting the health and welfare of maternity and infancy. But Congress has refused to renew these useful grants. In Europe, on the other hand, state maternity and nursing insurance schemes are general. One of the most interesting forms of public aid to families is that of the family wage system. Under this plan family allowances are paid by employing firms, from a common fund, to wives of employees for every

¹³ Publication No. 102, Washington, 1922.

¹⁴ Hughes, Gwendolyn, *Mothers in Industry*, 1925.

dependent child under a specified age. The system seems to have originated in France but has spread to Belgium, Germany, Austria and other European countries. In Belgium in 1930 and in France in 1931 laws were enacted requiring all employers in industry, commerce, agriculture and the liberal professions to pay family allowances to their employees. One of the most comprehensive studies of the family wage system and the problems growing out of it was made in 1925 by Paul Douglas.¹⁵ Since that time New South Wales has adopted the system of family allowances and New Zealand has developed a family endowment plan, providing for payments to families from state funds. The whole subject of public aid to families needs reinvestigation to acquaint students of society with the most recent facts and trends.

Control and Apportionment of Family Income. A question of great importance to the successful functioning of families is concerned with the control and apportionment of family income. This is a real problem in many families and it is by no means confined to the low income groups. Dr. Hamilton found that 34 out of the 100 wives stated that their husbands gave them no regular allowances for household expenses. On the question of income control and its apportionment to the present needs and future plans of the family spouses often differ sharply. So far as the writer knows, no comprehensive research in this problem has been made, although Chase Going Woodhouse made a limited investigation, based on data for 68 families, of the educated group, which disclosed a picture "of joint, or perhaps mutual control of family funds."

Household Production and Consumption. The shift from domestic to large scale production has created many problems concerned with household production and the value of the economic contributions of women in the home. Probably the most thorough investigation yet undertaken of the economic value of the housewife's time is that made by Hildegard Kneeland for the United States Bureau of Home Economics. Other problems worthy of research have to do with the effect of labor-saving devices, especially electrical inventions, on family life, leisure and recreation. Two limited studies of this question are at present under way in the Home Economics Departments of the Land Grant Colleges

¹⁵ Douglas, Paul, *Wages and the Family*, 1925.

which are financed by the Purnell Fund appropriated by Congress. But more comprehensive and more numerous investigations of the influence of electrical appliances upon home life would be of real value.

Since the consumption habits of households are profoundly influenced by economic, social and psychological factors, an investigation of the influence of advertising, of social life and of urban influences in general upon family habits of consumption might well be undertaken. Again, studies of family consumption in relation to health, savings, social emulation and family harmony would be useful contributions to a better understanding of the family in its economic aspects. A valuable study in this field is Professor Eliot's *American Standards and Planes of Living*.¹⁶

Cost of Medical Care in Families: Family Bereavement. As is only too well known, prolonged or repeated illness in families gives rise to grave financial problems and not rarely to family disorganization. Several years ago Niles Carpenter investigated this problem in family economics¹⁷ and other circumscribed studies have been made. The question has also received some attention from the Committee on the Cost of Medical Care which has recently published its findings and recommendations. But there is room for a series of searching and extensive investigations of the incidence of illness and prolonged medical care on family finances and family unity in selected urban and rural areas.

The effects of bereavement on the adjustive behavior of families is a question of no small importance. T. D. Eliot¹⁸ has for some time been engaged in investigating this problem and offers it as a new field for social research. He proposes a series of case studies of bereaved persons and families in an attempt "to appraise their success or failure, as individuals or families, in readjusting their status and habits in group life. . . ."

¹⁶ Eliot, T. D., *American Standards and Planes of Living*, 1931.

¹⁷ Carpenter, Niles, "Financing of Medical Care as a Problem in Family Economics," *The Family*, XI:162-67 (July, 1930).

¹⁸ Eliot, T. D., "The Adjustive Behavior of Bereaved Families: A New Field for Social Research," *Social Forces*, VIII:543-549 (June, 1930).

Family Discord and Disintegration: Broken Homes

Unquestionably the problems of the discordant and disorganized family have until very recently challenged the attention of social investigators far more than the functional difficulties of "normal" families. For some time research workers have been collecting an impressive body of materials treating of various phases of family disorganization.¹⁹ Alfred Cohen²⁰ points out the arresting fact that, in the United States, whereas 71 per cent of childless marriages end in divorce, only 8 per cent of married couples with children are eventually divorced. This suggests the question: What of the children living in discordant homes where husband and wife have decided to remain together for the sake of their offspring? Do these children prosper, physically and mentally? Miriam Van Waters, from the wealth of her experience in the juvenile court of Los Angeles, declares that the child who "is forced into the domestic arena (as participant or spectator) is condemned to lose no matter which partner wins." These considerations suggest the need of a study of the relative happiness and success in social adjustments of a group of children of divorced parents and of a group living in unbroken homes where friction, suspicion and active dislike permeate the family atmosphere.

Family desertion appears to be on the increase, although records are incomplete and unreliable. In 1928 the National Desertion Bureau, on the basis of figures furnished by 93 cities, estimated in its *Report* that family desertions in the United States are in excess of 50,000 annually. This estimate is admittedly a guess, and the fact that so little exact knowledge exists of the real situation suggests the need of a series of urban studies of desertion.

The Family as an Association of Interacting Individuals

When we turn to a consideration of the family as "a unit of interacting individuals," in Professor Burgess's phrase, urgent problems meet the eye of the research worker. During the last two decades a growing appreciation of the influence of the family on

¹⁹ Mowrer, E. R., *Family Disorganization*, 1927; Lichtenberger, J. P., *Divorce, A Social Interpretation*, 1931.

²⁰ Cohen, A., *Statistical Analysis of American Divorce*, 1932.

personality development has led to studies of the connection of home life and relationships with delinquency. Early among these studies was that of Breckinridge and Abbott, *The Delinquent Child and the Home*, followed by the investigations of Healy and Bronner, Slawson and others. Slawson's finding²¹ that the incidence of broken homes was 2.3 times as great for delinquents as for a control group of non-delinquents has quite recently been challenged by Shaw and McKay, who found²² that when nationality, neighborhood and age were held constant the proportion of broken homes was only 0.18 times as great for delinquents as for non-delinquents. In the face of an impressive body of evidence collected by social agencies showing a causal connection between broken homes and injured personalities of children, not rarely leading to delinquency, this question clearly requires further investigation.

The need of reliable criteria for judging home conditions in relation to personality development of family members has led to various attempts to work out scales for grading these conditions. One of the latest of these studies is that of F. Stuart Chapin.²³ This scale was worked out as a means of measuring the socio-economic status of the family in relation to its cultural acquisitions. The early scales for measuring the socio-economic status of the home need supplementation by other researches which work out reliable scales for gauging the influence of the more intangible factors in family life on the personality development of children—such factors as family affection and confidence, degree of freedom and responsibility accorded to children, methods of parental control, etc. Fortunately the need of social investigators for such instruments of measurement has led Professor E. W. Burgess and Dr. Ruth Shonle Cavan, together with other members of a sub-committee on Family and Parent Education of the White House Conference, to engage in the preparation of a set of "Human Relations Scales." These scales are based on data received from 16,000 public school children in reply to carefully prepared schedules. Over thirty questions had to do with the child's relation to his parents. In addition

²¹ Slawson, John, *The Delinquent Boy*, 1926.

²² Shaw, C. R., and McKay, H. D., "Are Broken Homes a Causal Factor in Delinquency?" *Social Forces*, X:514-524 (1932).

²³ Chapin, F. S., "Socio-Economic Status: Some Preliminary Results of Measurement," *Amer. J. Sociol.*, XXXVII:581-587 (Jan., 1932).

there were two tests of personality development and adjustment. The Report of findings of the sub-committee investigation has been written by Ruth Cavan and will be published as one of the volumes of the White House Conference Report.

An interesting study of *Parental Attitudes and Mental Hygiene Standards* has been made by Ralph Stogdill²⁴ of Ohio State University. The purpose of the investigation was to contrast the estimates of 110 parents of the relative seriousness of certain types of child behavior with the ratings of the same acts by 50 mental hygienists. The disparity in the two ratings was very marked. On the one hand parents rated such acts as stealing, masturbation, lying, cheating and disobedience as among the most serious offenses, while the mental hygienists rated depression, fears, cruelty, constant whining, suspiciousness and social withdrawal as most undesirable. The investigator was led to the conclusion that parents considered aggressive, extrovert acts, in conflict with conventional morality, together with opposition to parental control as the gravest types of offenses; while mental hygienists regarded extreme introvert and unsocial behavior as more undesirable than breaches of morality or of parental authority. Stogdill draws the inference from his study that parents attach extreme importance to conventional moral standards because they have not been instructed in the origin and nature of the moral taboos and customs they are forcing their children to observe. He further concludes that parents are too little concerned with the real mental hygiene difficulties of their offspring and "must be made more than superficially aware of the priceless value of an unmutilated child personality."

A wealth of data concerned with problem children in the home is being piled up by child behavior clinics, nursery schools, juvenile courts and Institutes for Juvenile Research which await investigation and correlation by research workers.²⁵ Miriam Van Waters, of the juvenile court of Los Angeles, has emphasized the fact that delicate relations between parents and children need perpetual

²⁴ Stogdill, Ralph, "Parental Attitudes and Mental-Hygiene Standards," *Mental Hygiene*, XV:813-827 (1931).

²⁵ The fine study, *The Child in America*, by W. I. Thomas and Dorothy S. Thomas, includes not only a survey of the agencies serving the unadjusted child but a study of varieties of maladjustment of children and the treatment of delinquency. See also Sayles, Mary B., *The Problem Child at Home*, based upon a study of 200 records secured from the clinics conducted by the Commonwealth Fund.

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adjustment. To make these adjustments intelligently parents need a more scientific and enlightened preparation for their high vocation than the present age is even yet prepared to offer them. Probably, as Dr. Van Waters believes, parent-child relationships will change slowly among the mass of fathers and mothers. In the writer's words: "Science and social work may assist, the newer legal attitudes toward the rights of childhood . . . will be of tremendous help, but fundamentally the changes in family life, considered socially desirable, must come by the growth process in individuals."²⁶

BIBLIOGRAPHY

- Briffault, Robert, *The Mothers*, 3 vols., 1927.
Calhoun, A. W., *Social History of the American Family*, 3 vols., 1918.
Goodsell, Willystine, *A History of the Family as a Social and Educational Institution*, 1915.
——— *Problems of the Family*, 1928.
Groves, E. R., and Ogburn, W. F., *American Marriage and Family Relationships*, 1928.
Groves, E. R., *Social Problems of the Family*, 1927.
——— *The Drifting Home*, 1926.
——— *Marriage*, 1933.
Hamilton, Dr. G. V., *A Research in Marriage*, 1929.
Howard, George E., *History of Matrimonial Institutions*, 3 vols., 1904.
Lowie, H., *Primitive Society*, 1920, Chs. II-IV.
Mowrer, E. R., *The Family*, 1932.

²⁶ *Parents on Probation*, p. 314 (By permission of Republic Pub. Co., N. Y.)

CHAPTER XV

THE FUNCTIONS AND LIMITS OF SOCIAL WORK AS VIEWED BY A SOCIOLOGIST

TO THE union of social-mindedness and social sympathy, two children were born. The older one, a daughter, became "out-going" in her emotional adjustments and insisted on doing something about it; the second, a son, developed into an "ingoin" child, and its introjective behavior took the form of scientific analysis. The daughter was called social work; the son rejoices in the name of sociologist.

This common parentage no doubt explains the nature of their relationship, for in the identity of their backgrounds, the feigned indifference of each to the other at times, and the insistence of each to speak with intimate frankness and assurance about the other, one finds between sociology and social work the same kind of relationship which prevails so frequently between brother and sister. At any rate, it is in this spirit that this chapter essays the task of appraising the limitations of social work as viewed by a sociologist.

Removing the tongue from one's cheek, it must be admitted that such an appraisal presents peculiar difficulties. Just what is it that is to be appraised, and by what measure? What, in other words, is social work? Is it what social workers do, what their spokesmen say it is, or what is implied in the movement as a whole? There are many types of social work, whether classified by unit of attention, or phase of relationship considered. It is carried on, at the one extreme, by persons of scientific temper and training equal to those of any sociologist and, at the other extreme, by persons who have no equipment save a certain neurotic susceptibility to human distress. Similarly, there are sociologies and sociologies—diversity of emphases and theories that are confusing even to members of the guild. In a certain sense, then, many different things can be said, with some justice at least, about social work, about sociology, and about their appearance each to the other. Moreover, the limitations of this chapter necessitate a certain positiveness of statement which may

say now more, now less, than is really intended. With this recognition of the difficulties involved, an effort is made to appraise what seem to be the basic implications of social work as a social movement by the fundamental emphases and viewpoints of sociology, with the hope that the main points of this chapter will be considered, rather than any incidental aspects which, with entire justification might be raised.

It seems both fitting and proper to begin with the clear cut recognition that social work has its functions in our social life, and that some form of social work will have its place in any but the most perfect form of human society. Within recent years, social work has become a distinctive type of organized service, with its own area of activity, and with an increasingly definite technique of procedure. Its twofold objectives—that of adjusting individuals, groups or classes, to their environment, or of seeking to affect some helpful alteration in their environment—certainly are vitally important functions in any society as complex and impersonal as is ours. Its distinctive features—those of taking into account the multiple needs of persons dealt with, and treating them as a unit; the flexibility of its program; and its devotion to those who cannot pay for such services¹—have their place among other approved methods of human service. Its developing technique accords with the spirit and scope of prevailing standards in other professions. In short, concerning the necessity for, and the basic objectives of, social work, there is general approval; of its practical difficulties, there is frank recognition; for its grip with the stern realities of life, there is wholesome respect. What are essentially to be considered in this chapter are the present emphases and implications of this movement, from the standpoint of that social science which is concerned particularly with the welfare of society as a whole.

1. Perhaps the most common criticism made of social work by sociologists is that it interferes with natural selection. Ross, Gillin, Chapin, Hankins and others have defended this view. Karl Pearson has been perhaps its most relentless exponent. The following statement, quoted from Hankins, may be considered as a representative expression of this challenge. "There can certainly be no question," he writes, "first, that inferiority of natural endowment tends to be

¹ Walker, Sydnor H., *Social Work and the Training of Social Workers*, University of North Carolina Press, Chapel Hill, N. C., 1928, pp. 20-21.

inherited; secondly, that it is a large factor in determining individual maladjustment in the present social order; and, thirdly, that modern humanitarianism tends to preserve the relatively unfit, to enable them, therefore, to reproduce more rapidly than would be true in a less humane environment; and that, therefore, there is every prospect that humanitarian effort in the long run will defeat itself by increasing from generation to generation the number of persons on whom humanitarian aid must be spent. In view of the tendency of the successful to have small families and the tendency of sanitation, charity, social work, and other humanitarian activities to promote the multiplication of the unfit, there cannot be the slightest doubt that the hereditary qualities of the stock are in danger of undergoing more or less serious deterioration."²

Concerning this criticism, several comments suggest themselves. First, much of what we term civilization—surgery, vaccination, steam heating, air conditioning, overcoats, sedans, pasteurization of milk, the development of grape fruit, and various other phases of modern culture through which man controls the conditions of his living—tend to interfere with the vigorous sway of stark old nature. Obviously, then, social work must not be singled out from other features of our life for criticism. To the extent that the above indictment would be true of social work, it would be true of the other artificialities in modern culture; to the extent that it is serious about one, it is serious about all.

Again, when so much of our environment is unnatural, it becomes pertinent to ask how much nature is selecting, and how much man. "These critics," says MacIver, "do not appreciate the significance of the social environment. They speak as though natural selection must or should operate alike in society and in outer nature. They do not realize the profound difference which society makes, so that natural selection is never natural under social conditions. * * * Society is through and through an 'interference' with nature. * * * And the further a civilization advances the remoter become the conditions under which natural selection can freely operate. * * * The trouble with the natural selectionist is that he is dealing with an

² Hankins, Frank H., "Humanitarianism in the Light of Biology," *Amer. Rev.*, Jan.-Feb., 1926, p. 60.

unreal world. * * * 'Nature solves no problem which man creates.'"³

Finally, there seems in the above criticism to be involved a misconception of the meaning of fitness. The use of this word as a scientific term has been most unfortunate, chiefly because of the connotations ordinarily implied. Fitness, it should be emphasized, is entirely relative, dependent upon the particular conditions obtaining at a particular place and time. It has nothing to do with innate capacity, ability or endowment, *per se*.

The reduction of infant mortality is cited often as an illustration of the social workers' interference with natural selection. That the infant mortality rate has been materially reduced in recent years, is evident. When, however, this reduction is examined in intimate detail, it is found that the chief gain has been made in the appreciable elimination of the gastro-intestinal diseases of infancy. In other words, given the sway of "nature" (or is it *laissez faire* in another guise), in our modern cities, many infants would succumb to diseases of the digestive tract, due to contaminated milk and faulty feeding. But social work interferes, and permits these "unfit" infants to survive. Now, if we wish to develop, as future patrons for the bootleggers, a generation with cast-iron stomachs who can survive even on fusel oil, then these infants are unfit, and social work, which reduces the chances of infecting the gastro-intestinal tract during the hot summer months, is a serious interference with a wise and far-sighted nature. Obviously, such "fitness" tells us nothing about the other qualities and potentialities of these infants.

It is only fair to point out, at this point, that many sociologists will contend that the example of infant mortality is the one least favorable to the general criticism under consideration, and that other illustrations of contrary import can readily be cited. Nor can the latter part of this contention be denied. To select an obvious case, social work which permits a feeble-minded couple, both of mentally deficient stock, to propagate their kind, is of entirely different social significance. Moreover, such cases are not lacking.

³ MacIver, Robert M., *The Contribution of Sociology to Social Work*, Columbia University Press, New York, 1931, pp. 24-25. Chapter II of this little book offers an excellent criticism of the views of the natural selectionist. See also Jensen, Howard E., "Is Social Work Contributing to Social Degeneration?" *Proceedings*, National Conference of Social Work, 1928.

What one comes to, then, is that social work covers a great variety of services, rendered to many different types of persons, with diverse problems due to complex factors, which means that to the careful student general statements, pro and con, must be examined in the light of the actual circumstances obtaining in any particular case. It is, however, entirely pertinent to raise the question, as many sociologists have done, and it is essential that social workers consider it and its implications, as they somewhat less frequently have done.

Perhaps the real fact involved is that any so-called interference with nature by social work creates further problems and responsibilities. When society, through its accredited agencies, saves infant lives, there must be faced sooner or later, as its natural complement, the practice of birth control. If social work accepts the responsibility of enabling most children who are born to survive, must it not accept also the now seemingly revolutionary responsibility of controlling the circumstances under which children may be brought into the world? If social work accepts the care of infant freaks, it must face also the reconstruction of the sanctions by which they are propagated. If children's agencies accept the care of children born out of wedlock, that society must face the far flung ramifications of illegitimacy as a social problem. Researches now in progress under my direction indicate that the marriage rate continues unabated among the unemployed during a serious depression. If society accepts the burden of the relief of the poor, does it not thereby obtain every right to reach back into the lives of these people and the organization of the industries employing them under normal times?

The first limitation of social work, emphasized by the writer, is that it is prone to "interfere" too little in a man-made (not natural) environment; that it does not follow the implications of its work; and that it has not accepted the responsibility of extending its "interference" to its logical and socially justifiable conclusions. This contention would seem to be borne out by the further limitations, to which we now turn.

2. A second limitation of social work, as now generally practiced, which cannot but impress the sociologist is its preoccupation with the individual. The development of individualized treatment has

been the outstanding trend in the recent history of social work.⁴ The majority of social workers are case workers;⁵ many of the others are dominated by the case workers' approach and philosophy. A person in need has been termed the beginning of social work, and for the last two decades, it has increasingly also been its end. The development of group work has been neglected relatively. It is haphazard, unsystematic, with no developed principles or techniques, despite the fact, as pointed out by Burgess,⁶ that most of the treatment of social problems, whether we like it or not, must necessarily be group treatment. To the sociologist, with his emphasis upon the group concept, of the self as a social product,⁷ of the individual and society as two aspects of the same thing, the extent to which social work has been dominated by concentration upon the individual, constitutes a seriously unbalanced approach to human problems.

3. Complementary to what has just been said is the third limitation, *i.e.*, the social workers' prevailing practice of attempting to adjust the individual to his or her environment, and with relatively slight concern about the latter. In justice to practicing social workers, it must be said that theirs is the obvious way to render immediate service. They are doing the things which give direct results, and under the stress of the circumstances which attend much social work, this is imperative and may be all that seems possible at the moment. Nevertheless, in submitting their procedure to objective analysis, this constitutes a definite limitation.

This tendency has been greatly intensified during the last decade by the steady parade of case workers into the camp of the psychiatrists and psychoanalysts, with the result that they have conceived of their jobs largely, or wholly, in terms of the individual's adjustment to his situation. Is the client hungry? Is his wife a poor cook? Does she refuse sex relationships? Is he bullied by an Irish policeman or Scotch employer? Let him be analyzed and led to a proper evaluation of the situation, and all will be well. Even to those of us who have profited through contacts with the "New

⁴ President's Commission, *Recent Social Trends*, 1933.

⁵ *Ibid.*, p. 1171.

⁶ Burgess, Ernest W., "The Contributions of Sociology to Social Work," *Social Forces*, VIII:490 (June, 1930).

⁷ Mead, G. H., "Cooley's Contribution to Social Thought," *Amer. J. Sociol.*, March, 1930; also, Burgess, E. W., "The Cultural Approach to the Study of Personality," *Mental Hygiene*, April, 1930.

Psychology," there seems little doubt but that social workers have wandered far into the Freudian wilderness only to come in many cases to a swamp land of psychoanalytic terminology, the meaning of which many seem to understand in reverse proportion to their enthusiasm for it.

It is not with this new tool of the social workers or its possible value that one is led to quarrel, but with the by-product of social philosophy which its enthusiastic acceptance has created. It has led social workers to develop an attitude of resignation; it has led them to focus attention too largely upon the individual's difficulties of adjustment to the situation rather than upon the challenge and the possible reconstruction of the situation in which the individual is found. In fact, the contention is often made that social work, because of its palliative treatment, not only omits but actually hinders a constructive approach to the more fundamental problems of social maladjustment. Especially have relief giving agencies been referred to as developing into rather autocratic bodies, serving in substance even if not in intent, to allay unrest and resistance against existing evils, thus becoming essentially tools of the capitalist class. At any rate, one can agree with MacIver that "if any two things are out of alignment or out of harmony, the desired adjustment involves a change in one or in the other or in both. If the individual is maladjusted to his group or his work or to society in general, it still remains an open question which should be adjusted to which?"⁸

It is but following the present contention to its logical conclusion to point out that the task of social work cannot permanently be divorced from the challenge of social forces. Beyond the endlessly repetitive quality of case work, behind the recurring problems of particular individual cases, are the types which they represent and their antecedent conditions. The goal of sociology, like that of any science, is the establishment of causal relationships. Thus proceeding, sociologists see the problems with which social work deals as the product of social forces, and they come naturally to question the practice of an art in the field of their study which tends so largely and so manifestly to ignore these very factors. It is true, of course, that the preventive approach has been talked about by

⁸ MacIver, Robert M., *op. cit.*, pp. 57-58.

social workers for over two decades, but it is no more than the simple recognition of a fact to say that while they have been learning to think preventively, they have continued to work curatively.

Within the last few years, certain rather material conditions have focussed attention upon the relative lack of preventive and constructive social work. The reference is to the money cost of social work. Until some nationwide accounting agency compiles the annual expenditures of that great network of public and private agencies sprawling over the country, the total of our social work expenditures cannot be known with any degree of accuracy. However, special studies in particular places and of limited activities which have been made, together with certain general estimates, indicate that the amount is enormous, running into billions of dollars each year. Whatever the amount, social work looms as one of society's most extensive and expensive sets of specialized activities, as well as a major form of income re-distribution.

We seem to have reached a point in social work where the financial and social acumen of present policies and procedure needs to be questioned, and perhaps measured in terms of social return. How much social work can society afford, without reference to social return? Have we come to a point where retrenchment is inevitable, involving the selection of certain types of social needs? Are the moneys spent for social work expended wisely and judiciously? Are there socially fruitful ways in which these huge expenditures may be reduced? Are there not constructive social measures, now known and advocated, which would yield larger social returns per unit of expenditure? Obviously, the depression intensifies the insistence involved in each of these questions.⁹

It may be argued that social workers constitute but one element responsible for the development of constructive social programs, and that this is a task devolving also upon statesmen, clergy, educators, and other responsible groups of citizens. While this must be admitted, it seems equally clear that because of the nature of their work and the peculiar insight which it gives, social workers have the responsibility of making known their observations upon the

⁹ Bossard, James H. S., "Speaking in Terms of Dollars," *Social Forces*, March, 1929.

general causes of maladjustment and of arousing public interest to the need of measures for dealing with these causes.¹⁰ "The social workers are, therefore, the group which seems cast for the position of leadership in arousing the public to the need of changing certain social conditions. Since they cannot accomplish their task by adjusting individuals unless the environment is reasonably favorable, they must do what they can to further an improvement of environment. They must submit to appraisal of their activities towards this end, as well as to appraisals of their other activities. How does social welfare work stand up under this double appraisal?"¹¹

4. Another limitation of social work, responsible at least in part for the failure of social work to play any appreciable rôle in dealing with more fundamental factors, is that it has not seen its job as a whole. Largely responsible for this failure has been the nature of its historical development. The field of social work has never been planned. Like Topsy, it has just grown up. And that growth has been a haphazard one, with a development here, an emphasis there, and an experiment in the third place. In other words, the past development of social work has consisted for the most part of a series of isolated and often unrelated activities by private groups of citizens, or public agencies, where and when interest and opportunity dictated. The situation is much like a garden into which various groups go to plant where and what they choose, without any general plan or system for the garden as a whole. The result naturally is much duplication on the one hand and numerous omissions on the other, and with relatively little of coördinated effort for broad and constructive social purposes. For example, despite the hundred and more separate child welfare agencies to be found in each of our larger cities, one finds little if any recognition of the problems of childhood, conceived either from the standpoint of the child or of the city as a whole. Hospital work is not integrated with other aspects of health work nor health work to other aspects of social improvement. Many other instances of this unplanned and uncoördinated nature of social work could be cited. It might be added, both by way of further proof of this point, as well as in fairness to social work, that an increasing number of its leaders are

¹⁰ Walker, *op. cit.*, p. 76ff.

¹¹ *Ibid.*, pp. 77-78.

aware of these facts. Suffice it to add that before any adequate control of social situations is possible from the standpoint of community treatment, a coördinated, coöperative program of social agencies now working separately is essential.¹²

5. Someone has aptly termed social work the repair department of society. Once this repair department is considered in its entirety, the next task is to understand its relation to the social machine as a whole, *i.e.*, to the social organization. The final limitation of social work emphasized in this chapter is the failure to appreciate this relationship.

The prime necessity of understanding the normal by those who are dealing with the abnormal is recognized in other professions and in the practice of other arts. Social work is no exception. Particularly is this true as social work reaches out for the status of a profession and a scientifically based art.¹³ When social work ceases, as it has done, to be the mere doing of good, with a religious anchorage; when it becomes more than uplift, with sentimental motivation, and becomes professional, it must have scientific understanding of its tasks, and scientific tools in their achievement.

What this implies, so far as the sociologist is concerned, is that social workers need to be well grounded in sociological theory. Social workers have not availed themselves of sociology as a preparatory discipline. This may be due in part to the earlier paucity of sociological material. Then, too, it must be appreciated that the leading social workers of today received their academic training in many cases years ago, and consequently are not aware of what present day sociology has to offer to them,¹⁴ just as college-trained business men are prone to think of economics in terms of twenty years ago. But the fact remains that a reputable body of sociological data and principles is now in existence, and is being constantly and rapidly increased. Some of these contributions of contemporary sociology are of primary importance for social work and will be summarized briefly at this point.

First, sociologists have developed a number of concepts which are valuable as tools in the defining and understanding of human prob-

¹² Burgess, *op. cit.*, *Social Forces*, p. 491.

¹³ Cf. MacIver, *op. cit.*, pp. 219-21.

¹⁴ Eliot, Thomas D., "Sociology as a Prevocational Subject," *Amer. Jl. Sociol.*, XXIX:744 ff.

lems. Burgess,¹⁵ Steiner¹⁶ and others have pointed out those which they deem of particular importance. A well organized presentation of these concepts is contained in Professor Bogardus' recent book on *Contemporary Sociology*.¹⁷ Riley¹⁸ has shown that these concepts are gaining a place in the current literature and are capable of rendering a valuable service to social workers.

Second, sociologists have not only developed concepts but have been using them in the making of sociological analyses which are throwing new light on the problems of individual and group behavior. Examples of such analyses are Thomas and Znaniecki's *The Polish Peasant*, Park and Miller's *Old World Traits Transplanted*, McKenzie's ecological studies, Ogburn and Chapin's work on social change, Bernard's work in social psychology and his analyses of environment, Steiner's community studies, Mowrer's work on the family, the work of the Chicago School on the urban community, and the contributions of many other sociologists. Even if the social worker plans only to deal with the individual, purposing to adjust him to his environment, it is difficult to see how that can be done adequately and intelligently without a knowledge of the larger social forces which have created the situation. It is well to emphasize, as MacIver has done, that "every situation is a focus in which heredity and environment have long been operative, in which national and class mores affect personal responses, in which political and economic factors working on a far broader scale precipitate personal disturbances, in which a changing civilization incarnates one of its myriad maladjustments."¹⁹ Or again, "every situation with which he (the social worker) deals is an eddy where economic and political and educational and other civilizational forces, complicated often by radical and religious issues, meet and swirl within the lives of particular human beings."²⁰

Third, sociology can give social workers an appreciation of the organic whole of society. "With the exception of Anthropology,"

¹⁵ Burgess, Ernest W., "Interdependence of Sociology and Social Work," *Social Forces*, May, 1923, p. 368.

¹⁶ Steiner, J. F., "Education for Social Work in Rural Communities," *Social Forces*, Sept., 1927, p. 44.

¹⁷ Bogardus, Emory S., *Contemporary Sociology*, 1932.

¹⁸ Riley, Thomas J., "Sociological Concepts in Use by Social Workers," *Social Forces*, June, 1929.

¹⁹ MacIver, *op. cit.*, pp. 14-15.

²⁰ *Ibid.*, p. 15.

writes Wood, "I know of no other subject that does reveal this total relatedness of social data. The social worker's need of the concept is experienced daily in his every effort to analyze and treat conditions of poverty, delinquency, family maladjustment, or any other situation whose roots spread widely throughout our complex society."²¹ It must be obvious, to sociologists and social workers alike, that any pathological condition needs to be analyzed and treated in relation to the social organism as a whole.

Fourth, sociology indicates the possibilities of the task to those who deal with social situations. It shows "what social conditions are susceptible of modification through human action and those which are not. This helps to conserve effort to be exerted where most effective. Pure sociology shows how difficult it is to modify social structure and how established most social structures are. Now social work often involves modification of social structure. In order to do this, it is necessary to know the nature of social structure. The study of sociology shows how particular structures have come into being and how they evolve. It shows that social structures of long standing cannot be immediately abolished or abruptly changed. Knowledge of modifications that are probably possible helps to avoid the passing of laws that are unenforceable."²² In somewhat similar vein writes Gillin. Sociology is important for social workers because it "will throw light upon the complexities and seeming absurdities of many of our institutions. It will assist in understanding the intangible, but none the less important influence of ideals, beliefs and institutions which grew up in various periods of social development and which survive in the agencies for various purposes in present day society, and will throw light upon the behavior of human beings living in the complex relations of today. Unless the student know something about national, religious and racial psychology he will not successfully deal with the multiplicity of human attitudes and ideals which the social worker meets in his work with different nationalities, races and religions represented in our mixed population today."²³ All this perhaps is equivalent to saying that sociology gives the social worker a perspective, a sense of

²¹ Wood, Arthur E., "The Place of the Social Service Curriculum in the Arts College," *Proceedings of the National Conference of Social Work*, 1928, p. 573.

²² Chapin, F. Stuart, "The Relations of Sociology and Social Case Work," *Proceedings of the National Conference of Social Work*, 1919, pp. 362-363.

²³ Gillin, John L., Presidential address. *Pub. Amer. Sociol. Society*, XXI:21-22.

historical value and measurement.²⁴ Perhaps the institutionalizing of social work itself, and its subsequent problems, might be well considered as a case in point.

Fifth, sociology fixes norms, both for diagnosis and for treatment. As Bernard has pointed out, "science may also be regarded as a collection of norms or standards, built up on the basis of observation and experiment and measurement, which is capable of serving as a means to the control of our relationships to our world."²⁵

Finally, sociology can give social work that which it so urgently needs but has not yet developed—a philosophy that goes beyond the day's work. What makes the development of a philosophy so imperative now is that social work has cut loose from its religious moorings and older ethical values. It must now develop the philosophy of a profession, which means that it must be built upon a scientific understanding of its jobs and their implications. It is a philosophy which must see its cases, not as the incidental phenomena of blind chance, but as inevitable products, on a natural cause and effect basis, of social forces operating against the background of a colorfully changing society, as incidents in a mighty drama, of diverse racial groups, with differing and shifting standards, faltering under the impact of new forces in the swirling life of a civilization that is in the birth throes of new mores and values.

Perhaps all of the foregoing points may be reduced to one fundamental contention—that social work, as viewed by the sociologist, is not yet adequately socialized. Its failure to carry its job through to the logical social end; its preoccupation with the individual and individual treatment; its lack of preventive and constructive emphasis; the lack of coördination in its efforts; its failure to see its work, conceived as a unit, in relation to the larger social organization—all seem to have this one outstanding meaning. Perhaps these facts, if true as charged, are the symptoms of a passing inferiority complex; perhaps they are the logical product of its history; perhaps they are the inadequacies of youth. At any rate, they represent the challenge of one very friendly disposed and intensely interested critic.

²⁴ See also, Cheyney, Alice, *A Definition of Social Work*, University of Pennsylvania Thesis, 1923.

²⁵ Bernard, L. L., "Standards of Living and Planes of Living," *Social Forces*, Dec., 1928, p. 191.

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BIBLIOGRAPHY

- Bodenhafer, W. B., "The Relations of Sociology to Social Work," *S. W. Pol. and Social Sci. Quart.*, IX:38-56 (June, 1928).
- Burgess, E. W., "Interdependency of Sociology and Social Work," *Social Forces*, I:366-370 (May, 1923).
- Eliot, T. D., "Sociology as a Prevocational Subject," *Amer. Jl. Sociol.*, XXIX:726-746 (May, 1924).
- Hankins, F. H., "Humanitarianism in the Light of Biology," *Amer. Rev.*, Jan.-Feb., 1926, pp. 52-60.
- Harrison, Shelby M., "Social Case Workers and Better Industrial Conditions," *Proceedings of the National Conference of Social Work*, 1918, pp. 303-312.
- Jensen, H. E., "Is Social Work Contributing to Social Degeneration?" *Ibid.*, 1928, pp. 16-35.
- Karpf, M. J., "The Relation of Sociology to Social Work," *Social Forces*, VI:511-519 (June, 1928).
- , *The Scientific Basis of Social Work*, 1931.
- Kelso, Robert W., *The Science of Public Welfare*, 1928.
- MacIver, R. M., *The Contribution of Sociology to Social Work*, 1931.
- Milford Conference, *Social Case Work, Generic and Specific*, 1929.
- Phelps, H. A., in Lundberg, Anderson, Bain, et al., *Trends in American Sociology*, 1929, Ch. VIII.
- President's Research Committee, *Recent Social Trends*, 1933, Chs. XXIII-XXIV.
- Queen, Stuart A., *Social Work in the Light of History*, 1922.
- Richmond, Mary, *What is Social Case Work?* 1922.
- Riley, T. J., "Sociological Concepts in Use by Social Workers," *Social Forces*, VII:495-497 (June, 1929).
- Shenton, Herbert N., *The Practical Application of Sociology*, 1927.
- Todd, A. J., *The Scientific Spirit and Social Work*, 1919.
- Walker, Sydnor H., *Social Work and the Training of Social Workers*, 1928.
- Williamson, Margaretta, *The Social Worker in Group Work*, 1929.



CHAPTER XVI

THE FUNCTIONS AND LIMITS OF SOCIAL WORK AS VIEWED BY A SOCIAL WORKER

THE welfare services of a nation may be said to constitute a segment of its total social organization and to reflect its dominant economic and political philosophies. There are for example radical differences in content and scope between the systems of welfare activities in the countries of continental Europe, Great Britain, Soviet Russia and the United States. In this country the term "social work" has become a popular designation for a variety of philanthropic and public welfare activities. It has been applied to agencies under voluntary and under governmental auspices formerly known as "charities" or "corrections" and to a variety of enterprises supported wholly or in part by philanthropic funds including activities whose objectives are one or more aspects of community welfare or of social reform. Recent developments in the organized functions of health, education, recreation, law and public safety and various proposals and programs for industrial welfare have to some extent been considered in the category of social work and have enlisted the participation of social workers. In the activities of professional groups, such as physicians, lawyers, teachers and to a lesser extent of industrial administrators and engineers, there has been a process of adaptation which has been vaguely designated as "socialization." In this development there has been considerable stimulation from the field of social work with the gradual infiltration of social workers as a separate vocational classification within these activities.

Because of this wide diffusion of interests and activities attempts to define the field of social work in this country have been largely unsuccessful. In limiting the boundaries upon the basis of the importance of the professional social worker to the functions of an organized service the definition has been too narrow; if classification is based upon the inclusion of a social objective the field of social work becomes too general and may be extended to any effort which

is not dominated primarily by the motive of private profit. This difficulty of definition is an important indication of the changing purposes of social organization, in which "social work" may be said to be an intrinsic factor.

The development of social work has its roots in the customary concerns of an economically stratified community with poverty. Organized welfare activities proceed from an assumption that conditions of individual poverty and maladjustment are matters of general concern. It is a nice question for sociological study whether this concern arises from motives of social sympathy or is an accommodation to the pressures arising within an unstable social organization. At any rate new forms and methods of service have been stimulated because of a critical attitude toward the traditional laws and methods of relieving the poor and reflect the desires of socially minded individuals to find practical and immediate ways of dealing with situations of community neglect or of personal maladjustment which have engaged their attention. Modern social work has therefore emphasized the necessity for a progressive improvement in methods and organization. It may be said to adhere to a platform not too clearly defined in terms of program that many of the factors producing poverty and distress may be largely reduced or entirely eliminated.

The major interest and the largest sphere of activity of social work continues to be that of providing for the defective and the disabled and for the economically distressed families and dependent children. This part of the field of social work carries on the functions of the traditional forms of poor relief which have been modified to a greater or lesser extent as improvements in standards of care have been introduced. In this category of activities the major developments have been attributed to the contributions made by the social case work methods. This has given rise to various processes of study of individual maladjustment, which have assumed the existence of norms of welfare in terms of more or less adequately defined personal needs. Service to the individual has been measured in terms of minimum standards of consumption and other essential needs. Case work as distinct from the administration of relief funds attempts to bring about a process of improvement both by marshalling existing resources and services for the benefit of the individual and by directing the relationship between the client and

other individuals in such a manner as to foster the possibilities for adjustment independent of charitable assistance.

Believing that many of the problems of poverty and of maladjustment involved factors of individual psychology and personal relationships, case work agencies have concentrated upon individualized education and have acted as intermediaries between the individual and the members of his family and associates and have interjected themselves into various phases of relationship between the client and the individuals concerned with the management of industry and of other community activities. In this phase of social work there have been numerous developments which amount to refinement of procedure or specialization of service among which might be mentioned mental hygiene and child guidance, juvenile probation, vocational guidance and direction, advice and clinical service upon matters of sexual and family relations and similar activities which emphasize personal needs and rely upon motivation of individual behavior. With the assumption that many deficiencies in the welfare of the individual were due to his inadequate understanding or ignorance or to his lack of use of existing facilities, considerable effort has been spent in the processes of education of the client in the use of personal and community resources. The social philosophy of case work programs in a measure coincided with the popular philosophy that the difficulties of an individual were due to personal factors and personal misfortunes. There has been less recognition of the possibility that individual problems may be related to the mal-functioning of social and economic institutions.

Because of the apparent values which seemed to flow from the case work method applied both in the treatment of the economically maladjusted and in the administration of relief funds, case workers have perhaps been laggard in urging the establishment of adequate relief provisions for the various forms of economic insecurity with which they were brought into daily contact. In some instances they were influenced in this attitude by a feeling that relief measures based upon acceptance of a dependency status were not constructive and were hopeful that the problems calling for relief funds would gradually be solved by other means. The assumption that relief should be considered solely as a tool to be used in the case work process is no longer acceptable, but the prevalence of this atti-

tude in the past delayed adequate relief organization and contributed little to the establishment of alternative measures. There have been, however, in the last two decades significant extensions and improvements in the organization of relief.

We may consider one of the permanent values of the case work method in relation to social welfare to consist in the specialized treatment and attention given to the individual as distinct from mass treatment. Such individualization which distinguishes the peculiar needs and circumstances of each client is an essential requirement of welfare provisions no matter how near to perfection may be the established forms and practices of community organization. Individualization of treatment is an indispensable basis of those services which deal directly with the individual, such as medicine and law. It has value in organized services which deal with groups or classes such as in education, and has been discussed in relation to social insurance and to other group methods of assuring family income and economic relief which may become established.

The limitations of social case work as a method of dealing with the mass problems of poverty which are inherent in our modern economic system have been thoroughly demonstrated by the current economic depression and by our inadequate methods of relieving the distress occasioned by general unemployment. Difficulties in adjustment faced by the individual, whether economic or psychological in character, reflect with great frequency the imperfect and unsatisfactory nature of general social and economic provisions. It is the particular responsibility of the social agency which comes into constant touch with instances of social maladjustment to discover these gross defects and enlist in an active campaign for their eradication. The lack of success accomplished by social work in this respect is to be attributed largely to the compelling influence which intrenched social, political and economic institutions possess over the viewpoints and imaginations of all persons. As a result of this pervasive influence to which social workers as well as others are subject, there is a paralysis of the critical faculty and a flattening of agency objectives. If fundamental economic and political institutions and established mores can be questioned only in times of great social strain or only by those who possess rare qualities of courage or detachment, it follows that the perspective of social

workers under ordinary conditions narrows to the possibilities of minor adjustments and small changes. Social case work as the maximum limit of methods for improving conditions of poverty is the natural by-product of a complacent acceptance of the validity and permanence of established economic institutions. Personal relationships are more accessible to the social worker; it is therefore easy to overlook the fact that they are of secondary importance compared with major problems of economic and social organizations. In theory the social case worker is interested in the client in relation to the entire social setting; in actual practice he has largely overlooked those very important impersonal relationships which flow from the business and economic structure, the political state, and from organized religious institutions with their very effective influences over the well-being of individuals and their control of instruments for effecting social adjustments and social change.

In contra-distinction from case work services the "social reform" types of social work derive from the assumption that the problems of individual maladjustment involve external factors inherent in lack of community resources or in inadequate development or character of such resources. Effort, therefore, has been directed toward the establishment or improvement of social resources to meet the needs of individuals, and social agencies for such purposes have been established or extended. In this group of activities we may classify the extension or improvement of educational, health, recreational and cultural facilities of the community as well as the new forms or agencies of relief and changes and improvements in the quality of relief opportunities. The present extension of public relief measures upon a large scale is another example of this tendency. The "social reform" approach also has led to an interest in and an attempt at the socializing of community institutions particularly those dealing with problems of legal relationships, the treatment of offenders and delinquents and the care of dependent and defective individuals. Little has been attempted in general community organization on a wide area aside from the financing and administration of philanthropic societies, although there has been considerable interest in the various theories for community reorganization which have been advocated. The participation in the improvement of industrial and economic institutions has also been of limited extent. It consisted in the main of organized activities

in behalf of the restriction of child labor and the increase in the period of compulsory education, state provisions for industrial accidents, and in some successful results in establishing more satisfactory industrial conditions for women, minors and to some extent for adult male workers. The so-called "industrial welfare" program has not advanced beyond the offering of nursing and recreational services through the industrial unit and some minor developments in industrial pensions and purchasing of stock by factory employees. In the wider area of community organization activities in behalf of city and regional planning, housing, and industrial organization have remained in the stage of academic discussion and wishful thinking.

In the development of the activities of social agencies the social worker has been an important but not always a determining factor. The tasks of social agencies have been carried on by paid workers, but control of social agencies is determined largely by unpaid boards representing in the main the contributors of large amounts or in the case of public agencies the managers of political machinery. The clientele and supporters of social agencies have varied considerably. The social workers who have been interested in the settlement movement as centers for stimulating culture and social reform largely found and established their own patrons and supporters and were, perhaps, a more determining factor in the conduct of the activities which they maintained. The field of organized charity, which is now called family social work, owes its existence more directly to philanthropic individuals interested in charitable aid to the poor. It is in the charity organization movement that the professional worker first began to flourish and develop. The recent development of community chests and federations represents a further diversion of agency control to representatives of the large business interests of the community. The public agencies of social work are under the influence of those elements in the community that are most important in the conduct of municipal affairs and state governments. Because of this form of organization of social work it is obvious that the status of the social worker lies somewhere between that of an independent professional agent and the employee of a business institution. It is to be expected that under such auspices social work has been a remedial rather than a revolutionary movement.

If we look upon social work as a movement for the improvement of social conditions it should be judged not upon the basis of the perfection of its administrative techniques but upon the breadth of its perspective of social forces and the extent of its courage in the direction of social change. From this aspect the present development of social work may be said to be deficient both in its philosophy and in its program. The major reason for these weaknesses I believe to be the tendency which many social workers share with the public as a whole to accept the *status quo* of political and economic processes of society as fundamentally satisfactory. The logical consequence of such an attitude is to regard the social problems of the individual as the incidental and, on the whole, unusual aspects of an otherwise satisfactorily functioning plan of economic and social organization. This tends to circumscribe the avenues of approach to social problems, limiting activities to the tasks of organizing social service agencies, of improving and extending their resources for dealing with the individual instances of social failure. It has led social work into over-emphasis on the case work method of achieving social improvement; it has concentrated activities upon the manipulation of existing social institutions to bring immediate advantages to the client; it has led other social workers into an absorbing preoccupation with the mysterious psychological elements of personal conduct. Agencies and resources have multiplied largely as adjuncts to the prevailing system of economic distribution and are poorly integrated and inadequately planned to meet the needs and problems of individual and family life even if considered solely as a remedial program. By comparison with Great Britain and other European countries that have built up extensive state supported systems with the aim of relieving economic insecurity and economic hazards upon an insurance or pension basis, our relief measures in the United States must be considered as poorly organized and inadequately developed.

Social workers have to some extent believed that the major weakness in social work is due to the lack of a scientific basis. But the critical social problems are not those whose solution is arrested because of the non-existence or the lack of application of scientific formula. The first hand contacts and responsibilities which social agencies assume are sufficient for gaining a fair realization of the nature of the problems which exist and of the direct factors which

are involved. Students of social work through research may help to organize this body of knowledge and aid in its interpretation, but no large social improvement is to be looked for through an intensification of the punching, assorting and tabulating of statistical cards, nor through the invention of yardsticks for measuring degrees of need, sequence-factors, or the merits of rehabilitative measures.

That there is considerable value in the detached viewpoints of those surveying the social scene who have an informed judgment upon its various phenomena is indisputable. Information and contribution to knowledge and insight derived from surveys and clinical studies have frequently been extremely useful in the analysis and treatment of instances of social maladjustment. Critical students of such theories and interpretations, however, will readily admit that many of these contributions are not of final value as knowledge. Social workers in fact have been frequently ready to absorb the hurried and unsubstantiated opinions of the academic schools and have exploited unfairly, perhaps, many doctrines, platitudes, and unsupported theories which have masqueraded as scientific "truth" because of their place of origin.

Social work owes a large debt of gratitude to students of society some of whom, perhaps, have not always been considered by their colleagues as adhering rigidly to the supposed restrictions of the scientific method. This group have been less interested in the techniques and methodologies for arriving at social knowledge and more concerned with understanding and interpreting the fundamental social processes. Upon the basis of an informed contact with social conditions, they have recognized the necessity for changes in the economic structure and in important social institutions.

I do not mean to suggest that the social sciences should be limited to those tasks which have a direct bearing upon the major problems of current social organizations. But social workers who function for the purpose of social improvement, not as detached observers but as field workers, must naturally remain indifferent to and regard as unimportant the products of the social scientist which are remote from the crucial problems of contemporary life. Sociological generalizations, which do not derive from an intense concern and intimate acquaintance with social needs, have usually

been sterile and unenlightening so far as the social worker is concerned.

In passing, it may be of interest to indicate a close cultural analogy which I believe exists between American social work and American sociology. Both have been largely concerned with methodology and techniques; they have failed equally to attack vigorously the vital problems of social and economic organization; they have limited themselves to the study of problems accessible to those not seeking for radical improvements. Neither one has helped to establish or become affiliated with a comprehensive philosophy and program of social reorganization.

The central problem of social work lies in the necessity for a program of welfare organization which shall be related to the complexities of social and economic organization and reflect improved knowledge and standards. Judged from this approach the development of social work has not kept pace with the intensification of social problems brought about by the rapid growth of the machine process and the high degree of specialization of function and interrelation of local units within the larger economic organization. Production and distribution have been organized on a national and international basis. This has destroyed the autonomous local basis of economic life and multiplied the hazards of insecurity for the individual. In spite of these radical changes in economic organization the beliefs and attitudes concerning individual welfare and adjustment have remained to a considerable extent those which were applicable in the pre-machine era and represent an outstanding example of cultural lag.

The central focus of organization for welfare purposes has tended to remain within the local community with emphasis upon private benevolence and has adhered rigidly to the assumption that the securing of economic subsistence as well as other personal needs of the individual could proceed best by individual action with major responsibilities resting upon the family and the immediate associates of each individual. In some of the specialized phases of welfare, such as in education and protection against contagious disease, the inadequacies of individual or local effort have been realized and the area of responsibility has slowly been enlarged. Although a national basis for the solution of many of the modern social problems which require state and national organization has

not as yet been attained, there is a growing emphasis upon responsibility of government as a central organizing force in community life and attempts are being made to enlarge the area of responsibility from the locality or the county to the state and the federal government.

In spite of inherent defects in structure and adequacy considerable progress has been made in the development of a more effective organization of social welfare facilities through governmental action. Upon the credit side, we may list the achievements in public education, in public health, in public parks, playgrounds and recreation facilities and in the beginning of attempts to control and regulate industry and public utilities. In the field of individual welfare some progress has been achieved through the state systems of compensation insurance for industrial accidents and occupational diseases, the state care of mental and physical defectives, in the development of modernized relief plans for mothers and dependent children and for the care of the aged. Adequate measures in these fields have not as yet been obtained for the entire nation but increasingly there is a tendency for more and more states to provide minimum measures of assuring income for special classes of dependents.

Many of these developments have taken place in a rather haphazard fashion and are not founded upon satisfactorily integrated programs of social welfare and social administration. We have made little progress in this country in providing these growing public services with a competent body of administrative and technical personnel. That the problems of the community are matters of national concern and require a national program has not yet been realized by the general public nor by the rank and file of social workers.

Although the present trend is unmistakably toward greater governmental responsibility for social welfare, voluntary efforts have occupied an important place in social work and have been responsible for a large share of whatever progress has been made. The need for private initiative not as a substitute for but as an auxiliary to those services which can most effectively be carried by governmental agencies is not likely to disappear because of increased public activity. There are essential functions for voluntary action to perform which may be dynamic in character if the motives

which impel private philanthropy assume a liberal character. Governmental services require voluntary action not as a rival method but as a coöperative activity. The intelligence brought to the reorganization of voluntary effort during this present shift of responsibility to government will be the determining factor in its survival.

Some of the unsolved problems of social welfare which require action and planning on a national scale may be listed. We are particularly deficient in the matter of assuring adequate purchasing power for all individuals. A constant surplus of labor growing to tremendous proportions during times of industrial depression and dislocation is the most striking deficiency in our present system of economic organization. A second fundamental problem lies in the gross inequalities of income distribution and in the insufficiencies of income from labor and industry which are a constant condition among classes of employees in many industries and in some whole groups of industries. The most difficult problems of individual adjustment cannot be effectively solved without a reorganization and control of production to assure minimum standards of living to the entire population. In addition to security of employment and minimum standards of income there are the problems of interruption of income which come from unemployment, from temporary or chronic disabilities and from problems of family dependency which result from the death or incapacity of working members.

Many of the present problems of individual welfare arise from an unsatisfactory organization of urban and rural facilities for housing, employment, education, health and leisure. Unplanned cities and towns add to undesirable living conditions. Some of the most serious problems of individuals and of communities arise from dislocation in agricultural and industrial processes and in the lack of an integrated and balanced plan of production. Many of the essential services required for personal well-being making available to every individual proper services for health and personal life, recreation, culture and enlightenment are organized for individual profit which prevents free access to such sources to large portions of the population.

Further organization is required for public enlightenment in matters of sex, personal hygiene and personal relations. Various

restrictions and taboos prevent free access to the knowledge of personal hygiene and relationships which represent some of the most valuable contributions of modern scientific thought. Although there has been some advance in knowledge of mental maladjustment and of undesirable manifestations of personality and behavior, we lack an adequate understanding of the social factors involved in mental hygiene and mental pathology.

The logical deduction to be drawn from this partial list of problems is that the major objective of social work should be in the direction of economic reorganization. Without entering into a discussion of the relative merits of the various radical or conservative remedies which are being proposed, it may be pointed out that welfare organization lags far behind the machinery which has been evolved for the production and distribution of goods and services on a profit basis. Even if no new political form of economic control should be introduced, a vast development of centrally organized welfare provisions is required if social service is to parallel the complex nature of economic institutions. Otherwise existing social service measures which seek to deal with the economic insecurities and social deprivations of large sections of the population will become totally inadequate to meet the increasing problems of human welfare.

The economic problems have been stressed because they represent the toughest and most pervasive factors in the present struggle with human ills. But social workers are not unaware of other problems second only in importance to that of economic insecurity. One of the most outstanding of these has been of major interest to the biologist and the eugenicist, that of the quality of human stock. If our generation can solve the problems of economic and social organization and provide an essentially satisfactory social environment, the next generation may be able more scientifically to determine the desirable methods through which eugenic improvement may be obtained.

As we drift into a collective social and economic order with more centralized control over various human activities, we are confronted with an increasing objection that such organization can be achieved only at the expense of individual freedom. Sometimes this is a genuine concern over the threat to creative self-expression and not a basic reluctance to curb the aggressive tendencies of individuals

who have been relatively free to create for themselves specially favorable circumstances at the expense of others. Social workers find little of freedom in the present scene with the repressive and disorganizing restraints and the insecurities imposed upon large sections of the population. Their present tasks involve them in continued efforts to aid individuals to regain some measure of security in the midst of increasing insecurity and to discover some opportunities for development and self-expression in a world of narrowing opportunities.

The establishment of well-organized provisions for economic participation and security of the individual will not change to any large degree the functions of the social worker, though it may revolutionize the character of social agencies. Instead there is likely to be a large increase in the tasks of administering the new economic provisions for individual and family welfare. An intelligent social order would, no doubt, recognize the values of individualization of treatment and continue and expand those services of case work which aim to further the adjustment of the individual including not only the individualized services required in the functions of education, health, and vocational organization but also in the more personal problems of sex and family relationships, and of group participation and interaction.

Although this chapter presents a critical view of social work, it may be said that this segment of our social organization represents the definite response we have made as a society to the maladjustments of our social order. Social work does not deal very effectively with major difficulties because our society has not as yet decided to extend control over important social and economic processes.

It is obvious that the functions and limits of social work are not static and can be defined only in relation to an evolving social organization. What we call social work in this country owes its importance to the fact that private initiative and the exchange of goods and services upon a monetary basis create situations of individual maladjustment which cannot be ignored and leave unsolved many individual needs. Social work, therefore, is one of the contemporary expressions of socialization. In present usage socialization, extension of the functions of central government, collectivism appear to be synonymous terms. All of the activities of

government are in effect "social work." The future of social work is primarily dependent upon the motives and the direction which may be developed in voluntary initiative and in governmental programs. Judging from the experience of other nations there is a tendency toward increased control over economic forces and toward reorganizing social machinery for satisfying human needs. If we are to duplicate their experience contemporary social work in this country will evolve into or be replaced by the socialized state of the future.

BIBLIOGRAPHY

- Abbott, Edith, *Social Welfare and Professional Education*, 1931.
Bossard, James H. S., *Problems of Social Well-Being*, 1927.
Karpf, Maurice J., *The Scientific Basis of Social Work*, 1931.
MacIver, Robert M., *The Contributions of Sociology to Social Work*, 1931.
Odencrantz, Louise C., *The Social Worker*, 1929.
Warner, A. G., Queen, Stuart A., and Harper, E. B., *American Charities and Social Work*, 1930.
Proceedings of the National Conference of Social Work, 1917-1932.
Social Work Year Book, 1933, Published by the Russell Sage Foundation, New York.



CHAPTER XVII

METHODS OF DEFINING THE SPHERE, PROBLEMS, AND EFFECTIVE PROCEDURES OF SOCIAL WORK

AS CONTRASTED with the chapters by Professor Bossard and Mr. Lurie on the possibilities and limitations of social work, this chapter is concerned with *methods*—methods whereby the sphere and the problems of social work may be defined, and methods of determining effective social work procedures.

I. *The Sphere of Social Work*

It is obvious that the “sphere” of social work has not been defined with any exactness. But neither has the sphere of any other profession. In every case we have the impression of a core or nucleus of activities and responsibilities assigned by common consent to the profession in question. Around this nucleus we observe a wide fringe of services for which responsibility is shared with other groups. Thus health education is the concern of teachers, physicians, and social workers; venereal disease control concerns police, educators, and social workers. Our problem then reduces to this: How determine whether social work has any distinctive center or whether it is all fringe?

Because common usage applies the term social work to such a multitude of activities, it is necessary to break this vast field up into divisions and subdivisions. Thus we may consider family welfare, children’s aid, child guidance, probation, hospital social work and the like as varieties of social *case work*. This has been pretty thoroughly done by the Milford Conference¹⁰ and by job analyses sponsored by the American Association of Social Workers.^{7 12}

We may then take scouting, playground supervision, settlement work and the like, as varieties of *group work*. This too has been done, though perhaps less adequately, by Miss Williamson¹⁴ in her job analysis. Similarly we may study work in orphanages, homes

for the aged, reformatories, hospitals, and schools for the physically and mentally handicapped, as varieties of *institutional work*. Finally, we may examine the work of executives, councils of social agencies, community chests, and the like as varieties of *administrative work*.

We may list likenesses and differences within each supposed genus and evaluate their significance in relation to the overlapping of other professions. Then, if we find many activities and objectives shared by the varieties of case work, let us say, but not shared with other fields, we would seem to have a definite sphere of action. But our task does not end there. Our next question is: What objectives and procedures of the four *genera* are alike, but not shared with outside professions? This task was undertaken by the faculty of the New York School of Social Work as a basis of reconstructing its curriculum and is described in its Bulletin of October, 1928.

In general, the study of social work's "*sphere*" will include these steps: (1) questioning representative workers as to just what they do, (2) asking supervisors and executives what their staff members do, (3) interviewing clients and various lay folk to learn their conception of social work, (4) consulting members of other professions to discover interrelations and overlapping, (5) examining professional literature to identify objectives and processes. The study will require careful analysis of the assembled data, classification, and elimination. Many definitions of social work have been presented¹¹² but a field that is undergoing such continuous and rapid change needs constant study.

II. *The Problems of Social Work*

Much that has been said about "*sphere*" applies directly to "*problems*." This part of the assignment may be handled in either of two ways. We may start with the major objectives—assuming them to have been defined—and analyze them into their "*logical components*." Or we may list the specific requests made of social workers by clients, board members, and citizens generally, and then classify these. No matter at which point we begin, we will presently compare the "*classified requests*" with the "*logical components*." If the two lists approach agreement, the project will be easy. If they

present marked contrasts it may have to be abandoned as impractical at the present time. It is our guess, however, that if the sphere of social work can be defined, its specific problems can be stated without great difficulty.

III. *Procedures in Social Work*

The effectiveness of social work procedures can be determined only in relation to the objectives and problems set. In the discussion of ways of determining effectiveness we shall confine our attention to social case work in order to abbreviate and simplify the presentation. On this basis we may consider six major problems.

1. Case by case, is the service rendered followed by attainment of the objectives set?

2. Case by case, what evidence is there that the social worker contributed to success or failure as defined?

3. Case by case, is there evidence that service to the client affected favorably or unfavorably the pursuit of similar ends for other persons?

4. In general, is there any correlation between specific services and specific results to persons and families?

5. In general, do programs of service to individuals and families promote or retard corresponding or other services to the community?

6. In general, do programs of ameliorative action promote or hinder programs of preventive action in pursuit of the same or related goals?

1. Probably every real case working agency has intermittently examined its work to learn whether in given cases the results desired were achieved or at least approximated. In 1929 the New York School of Social Work⁸ made such an analysis of 196 cases handled in the Bureau of Child Guidance. Three points were supposed to be "tested": (1) adjustment of the child himself; (2) adjustment of parents to the child's problem; and (3) adjustment of other persons involved. The evaluation involved a series of *ex parte* judgments and took the form of comparing the separately formulated opinions of staff, parents, and teachers. This was frankly a subjective procedure, but at least one set of opinions was checked against two others.

In the same year the Judge Baker Foundation⁵ completed a study of 501 young persons presenting cases of delinquency or personality problems treated by foster home placement. The criterion of success was the individual's "steady gain in his ability to master his difficulties and maintain his position as a desirable member of a family and a community." This statement alone is, of course, very general and capable of varied interpretation; but considered as the summation of a questionnaire of 150 rather specific items concerning home, relationships, and participation in groups, it has real merit.

2. Thus various attempts have been made to identify success and failure in terms of chosen objectives. But they do not show what, if anything, social workers contributed to the result. Satisfactory adjustments might have been made without the intervention of case workers; or they may have resulted from quite fortuitous events. Moreover, the services of a child guidance clinic or a children's aid society include a host of different procedures. It is therefore necessary to determine just what techniques were used, consciously or unwittingly, before taking further steps in evaluation.

Something of this sort was attempted by Mowrer⁶ in his study of social treatment given to cases of domestic discord in Chicago. He summarized the situation at the opening and at the close of each record under the following heads: economic, environmental, health, education, habits, morals and behavior, recreational, and legal. Marital relations at the close of the record were labelled "continued discord," "no record of discord," and "adjustment of discord," each term being carefully defined. He then classified the social workers' techniques as "ordering-and-forbidding," "auto-suggestion," "persuasion," "housekeeping instruction," "extradition," "conference technique," and the like. Comparing the work of two agencies he found a higher proportion of adjustments in one, and then considered the techniques used in the two agencies. But either he did not follow this comparison through or else he failed to report on it (except as he attempted to measure the "intensity of contact," a tedious job which yielded nothing of consequence). But he did go on to correlate outcome with age, size of family, status of discord at time of agency recognition, and other factors beyond the control of case work. The variations thus shown suggested that success may have been more closely related to these fortuitous conditions than to any specific social work technique. However, Mowrer did not

establish this inference. Most of his effort was devoted to analyzing the techniques "in relation to what is known about human nature." While this was a natural step and its results are highly suggestive, the method is full of obvious hazards.

3. It may fairly be asserted that no adequate measures of social workers' contributions to personal adjustments have yet been devised. But results of the attempts already made indicate that the task is by no means hopeless. When, however, we turn to the question of how services to one person affect others we are in a virgin field. For example, how can we tell whether solving one man's problems through employment at reduced wages encourages his employer to cut the pay of other workmen? We may be able to establish this sequence in individual cases, but how can we discover and measure the influence of other factors? How can we compare this result with other alternatives? So far as I am aware, no one has yet done any systematic work on this problem. Yet it must be dealt with before any piece of social work can be properly evaluated.

4. So far we have been discussing ways of determining the effectiveness of social work procedures in specific cases. But, of course, the value of given techniques as related to given objectives can be established only through the study and comparison of many cases. As a matter of fact, the studies already referred to did include such comparison. But all of them display serious difficulties and shortcomings. The New York School and the Baker Foundation were trying to evaluate general case work programs rather than specific techniques. They gave inadequate attention to other factors which might have affected the results. They neither controlled the variables in their own cases nor set up "control groups" for comparison. As a matter of fact, no one has yet established the practicability of such controls and hence approximation of the experimental method in social case work. Yet the attempt must be made to find persons, families, or situations sufficiently alike and sufficiently under control that one important factor at a time may be varied and the results noted.

IV. Tests of Efficiency in Social Work

Most of the "efficiency studies" made so far are very much cruder than this. For example, in crime surveys it is customary to measure

efficiency in terms of convictions secured, defaulted bonds collected, recidivism, and the like. Sutherland has well described the limitations of such studies of social work "mechanics."⁸

In recent years efficiency has frequently been rated in terms of volume and cost. Such studies make an appeal to business men and community chest executives; they have a real place in the study of social work procedures; but their limitations should be obvious to all real social workers and sociologists alike. For example, if Detroit gives more relief per capita of the whole population, than does Cincinnati, it may mean that Detroit's relief is more adequate, or that it uses less discrimination, or that its needs are greater. In other words, it is no measure of effectiveness. Another illustration—if it be found that children's agency A visits each placed-out child 1.7 times per month while agency B visits 3.5 times per month it may mean that agency A is negligent, or deals with children requiring less attention, or depends on correspondence, collateral calls, and office visits, or its workers must travel great distances, or their calls are less hurried than in agency B. Again we have no measure of relative effectiveness.

What nearly all these studies lack is a breaking up of the problem into manageable units, precise definition of terms, and comparison of cases differing in only one important aspect. Several years ago in analyzing the services of a case working agency Karpf⁴ showed the limitations of such units as "case" and "visit," urging instead the "problems" presented. But so far problems have been listed in very unsatisfactory ways. A typical statistical card will list unemployment, tuberculosis, non-support, ignorance of English, unsanitary housing, and others in a mixed array. Perhaps more hope lies in efforts like Mrs. Sheffield's⁹ to formulate diagnosis in terms of "clue aspects" or "meanings," or "social situations." However, that too is still to be demonstrated.

Probably the most thorough study yet made of the results of a social work program is the Gluecks' study of 500 delinquents in Massachusetts.² Their terms and criteria of judgments are carefully defined; their program for locating the men and verifying facts about them is unusually thorough. Yet their results are essentially negative. They showed beyond a doubt that reformatory and parole have failed in a large percentage of cases to produce socially acceptable conduct. But it is impossible from their data to

discover what procedures were effective for given types of men and what ones were useless or harmful.

5.—6. Most of the remaining problems and methods of studying them belong in the realm of social psychology. In general, do given programs of service to individuals and families promote or hinder the attainment of given objectives by the community as a whole? For example, does unemployment relief help or hinder the development of unemployment insurance or the stabilization of employment? Does putting with old age relief promote or obstruct provision of real old age security? Do social workers who depend on wealthy donors for support tie their own hands and close the door against effective action to secure wider distribution of buying power? Does concentration on palliative measures divert attention from need of preventive effort? We may as well admit that we have as yet no accurate means of answering these questions. In general they are problems of public opinion rather than problems of administration. Until social psychologists devise more satisfactory means of identifying and possibly measuring the forces that affect public opinion we can do little with this group of problems.

In this discussion I have hardly mentioned group work, institutional care, or social service administration. I have offered very few constructive plans of research. But I have at least reviewed the methodological problems which seem to me to be involved in determining the scope and effectiveness of social work.

The development of satisfactory tests of the effectiveness of social work procedures will be very difficult, because the processes involved in the modification of inter-human relations are very complex. But the development of such tests is vital, because enormous sums of money are being spent each year for social services of various kinds. The paying public is demanding reduction in these costs and executives are slashing budgets. We all—social workers, clients, tax payers, contributors, and sociological observers—want to know whether valuable services are being eliminated, whether useless agencies and programs perpetuated, and in general how effective social work procedures are in accomplishing purposes which we may regard as important.

It is not for sociology to say what should be the goals or sphere of social work, though it may help to determine the field that social work actually occupies. It is not for sociology to formulate all the

problems of social work, for some of these belong to the realms of economics, psychology, and biology. The testing of results of social work procedures is primarily for researchers in the professional schools. But in the analysis of what happens to groups, to personalities, to social relationships, to inter-human give-and-take, sociology and social work have a common interest.

Social workers can open to sociologists a rich field of data; they can present a host of practical problems whose solution may depend on the answers to more general questions studied by the sociologists. The sociologists in turn should bring to social workers the perspective of comparative studies and skill in the abstraction of particular elements, which are essential to sound generalization. Truly here is a fruitful field for coöperation.

BIBLIOGRAPHY

- (1) Cheyney, Alice S., *The Nature and Scope of Social Work*, American Association of Social Workers, 1926.
- (2) Glueck, Sheldon and Eleanor T., *Five Hundred Criminal Careers*, 1930.
- (3) Healy, Wm., Bronner, A., Baylor, E. M. H., and Murphy, J. P., *Reconstructing Behavior in Youth*, 1929.
- (4) Karpf, M. J., *Social Audit of a Social Service Agency*, Jewish Social Service Bureau, Chicago, 1925.
- (5) Lee, P. R., and Kenworthy, M., *Mental Hygiene and Social Work*, Commonwealth Fund, 1929.
- (6) Mowrer, E. R., *Domestic Discord*, 1928.
- (7) Odencrantz, Louise, *The Social Worker*, 1929.
- (8) Rice, S. R., ed., *Methods in Social Science*, 1931, pp. 528ff.
- (9) Sheffield, Ada E., *Case Study Possibilities*, Research Bureau of Social Case Work, Boston, 1922.
- (10) Sheffield, Ada E., "The Situation as the Unit of Family Case Study," *Social Forces*, IX:465-474 (June, 1931).
- (11) *Social Case Work, Generic and Specific*, American Association of Social Workers, 1929.
- (12) Warner, Amos G., Queen, Stuart A., and Harper, Ernest B., *American Charities and Social Work*, 1930, Ch. XXXIII.
- (13) Williamson, Margaretta, *The Social Worker in Child Care and Protection*, 1931.
- (14) Williamson, Margaretta, *The Social Worker in Group Work*, 1929.

PART II

THE SOURCES AND METHODS OF SOCIOLOGY

CHAPTER I

THE SOURCES AND METHODS OF SOCIOLOGY

The Nature of Science

SCIENCE may be defined in terms of the six major processes that take place within it. These are testing, verification, definition, classification, organization, and orientation, which includes prediction and application. Scientific knowledge is to be distinguished from any other form or body of knowledge or opinion or belief, such as story, myth, or philosophy, by the degree to which its data and conclusions have been tested and verified. Testing involves careful observations, preferably by means of standard instruments of measurement, such as physical units of measurement, mental tests, logical formulas, and statistical devices. Verification involves logical comparison and definition of data and the repetition of the tests already made by other testers. If substantially the same results are produced by all the tests, the results are generally accepted as true. Scientific data, however, no matter how well they may be tested and verified and defined, do not constitute a science. They are merely data. Three other steps are necessary to make of them a science. First, they must be classified, so that they may thereby become readily available and easily comprehensible in their various relationships and bearings. Such classification normally begins in definition and leads to organization, including generalization, and orientation. The organization and the orientation of a science will depend upon its growth and development around certain fundamental control problems—those problems which the makers of the science have recognized as central. It is this organization and orientation which constitutes the essence of the science.

The scientific data may or may not have existed, as a whole or in part, before the appearance of the science. The science may start with a small body of recognized data and then create new data in order to expand its scope and broaden or strengthen its field. It is a matter of little importance where data come from—whether they

are borrowed or are original—, but the significant thing about a science is the organization of data into an integrated whole or explanatory body of tested knowledge which affords orientation. The business of the science is to interpret, to give viewpoint, to integrate scientific data from whatever source, into a body of interpretation which will explain and control that part of experience and interest which is embodied within the field covered by the science in question.

In the light of this definition of a science, the question of whether the social sciences, including sociology, are really sciences becomes rather absurd. Many of the natural scientists, or so-called exact scientists, maintain that the social sciences are not really sciences, but are rather either philosophic disciplines or applied arts. Evidently the criterion on which the natural scientists base such an assertion is the first part of our definition of science to the exclusion of the last part. Their criterion of science is in the test and the verification of data, and therefore they make science synonymous with scientific data. If, however, we adopt the wider criterion of science stated above—and in practice the natural scientists do and must adopt it—the social sciences must be considered to be as fully entitled to the denomination of sciences as are the natural sciences. If, on the other hand, it is contended that their data are frequently not as exact, this contention must be granted. For a number of reasons, which need not be stated here, the social sciences are less exact than the natural sciences in many of their definitions and interpretations.

All sciences, therefore, obviously embrace two aspects. One is the critical aspect, embodying the testing and verifying and definition of data; and the other is the interpretive aspect, making use of classification, organization, and orientation as a means to enable the scientist and the users of science to comprehend and control their world—both of practical adjustments and of ideas—more or less in the large. It is this last function of the science which gives to it its name and field and marks off its boundaries from other sciences. It is this function which raises it out of the chaos of "knowledge" to the organized character of a "science."

The Origin and Development of Sciences

Sciences come into existence, that is, get their organization and orientation, around some problem or set of problems. These problems may be very practical problems of adjustment to environment, or they may be theoretical problems dealing primarily with ideas rather than with immediate practical adjustments. In the earlier development of science the former type of problems predominated, and science was with difficulty distinguished from the arts. But with the growth of considerable funds of tested and verified knowledge the second type of problems began to be central in scientific development. Thus originated theoretical or pure science, first typified by the Greek and subsequent systematic philosophies and later by the modern environmental sciences and the new theoretical functional sciences already described in the first chapter of this volume and now to be further analyzed. It finally became the practice of the scientific thinkers or investigators in need of new data for the organization of their scientific systems of orientation not to wait for these data to appear spontaneously, but tardily and irregularly, in the everyday affairs of active life or of human behavior, but rather to create these new required data. At first these desired new data were created imaginatively or by hypothesis, and systems of logic were developed as means of testing and verifying these hypothetical data. This is the meaning of Socrates' and Plato's dialectic process and of Aristotle's deductive logic. Under the influence of such logical tests there grew up a highly speculative science, or philosophy, as we ordinarily call it. But hypothetical or speculative science, based on assumed or logical events, proved to be inadequate for the proper orientation and guidance of man, either in his thinking or his action. Not all of the possibilities or contingencies of behavior could be foreseen imaginatively, even with the help of logic, and as a consequence speculative science or philosophy grew into disfavor because of its lack of reality. The great speculative debauch known as Scholasticism, which represents this method at its most active extreme, destroyed its prestige by reducing it to an absurdity. Its constructive orientations had gone so far beyond realistically verified knowledge that they were generally repudiated.

But the repudiation of speculative science in the form of Scholasticism did not result in the return of scientists or philosophers to

the pedestrian method of waiting for events to happen in everyday life before they were appropriated by the theorists or thinkers for purposes of rounding out their organized scientific bodies of interpretative knowledge. They found a better method. They set about creating the needed data by a new and much more realistic method than the hypothetical and logical thinkers had used: they experimented, not alone in their minds, but with objective reality. To be sure, they continued to hypothecate facts, which they tested by means of their verbal logical procedures. But they did more than this; they created objective and realistic situations in the environment which would serve to test their hypotheses before their hypothetical and logical conclusions were actually given to the world at large to be put in practice in thinking and in action. Under the old speculative or imaginative system of creating a science, new supporting data were manufactured out of mind, as it were, and were integrated into explanatory systems which were turned over to those who would apply them to the actual adjustment problems of life without further verification. If these systems failed to work, the users paid the penalty. Under the new system of laboratory or other realistic experimentation, the hypothecated data are subjected to realistic and practical tests before they are allowed to go into the finished explanatory systems. As a consequence, there has been an earlier mortality of hypothetical ideas or data, but the users of scientific systems, or sciences can count upon much better results for their faith and their pains. As a consequence, the experimental method, and especially the laboratory method, has grown steadily in reputation as a process of creating the realistic facts of nature and of life before they actually occur in the ordinary naturalistic process. Even the margin of unreality and artificiality of laboratory-made data, as compared with those produced by realistic natural processes, has not been sufficient to destroy their reputation when compared with the data speculatively produced and logically tested.

In this chapter I shall merely outline briefly the various methods and problems of producing scientific or tested and verified data and of generalizing them into social sciences as basic disciplines to be used in the solving of practical or theoretical social adjustment problems. The several chapters which follow this will discuss these methods and problems in detail from the standpoints of the several sociological sciences which together constitute the general science of

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sociology. The purpose of the present chapter is merely to orient the reader with regard to the general field, of which the subsequent chapters are detailed treatments. The bibliography at the end of this chapter will serve to afford further orientation in the same general direction.

The Sources of Scientific Data

The sources of existing and ready made sociological data, as was indicated in the first chapter of this book, are almost universal, since sociology, in common with the other functional social sciences, draws its data from all sources regardless of territorial lines and scientific entities. But most of these sources are only incidental and occasional. The data more commonly utilized are obtained from a few general classes of sources which may be mentioned here and treated in more detail in the specialized chapters which follow. These are both field and collected sources, the latter being frequently literary in character. The field sources are all types of population and functional groups, aggregations, and even individuals, who can be measured, analyzed, and studied, on the one hand, and the adventitiously deposited remains of human activity and culture, on the other hand. The population and functional groups are of course contemporary and they exist in an almost infinite number and variety of forms and functions. The analysis of such sources and the extraction of data from them is such a familiar and common process that it will not require further illustration than a passing reference to the numerous studies of population movements, ecological concentrations and integrations, marriage and divorce trends, the location of immigrant, race and culture areas, juvenile delinquency, housing, sanitary conditions, and the numerous data and trends with regard to the availability and utilization of cultural opportunities in our society. The deposited remains of past human activity and culture are less numerous and also less easily analyzed and utilized as sources of sociological data, but it is a significant fact that the archæologists are now unearthing the data necessary for the imaginative literary reconstruction of past civilizations and thus for making very large and important contributions to the field of folk and cultural sociology. The field sources embrace all grades and types of cultures, past and present, from the most primitive to the most civilized.

The collected sources of data we find in museums, record collections and libraries. They exist in all sorts of material and non-material cultural remains salvaged from the decaying civilizations of the past and from contemporary sources, such as the museums of police departments in large cities, art galleries, the Lindbergh collection of trophies, local, state, and national archives and records. Perhaps the most important of all of these collections of data are the libraries, where are gathered immense numbers of printed volumes, documents, reports, periodicals, manuscripts, etc., covering every conceivable type of facts. Such splendid collections as the Library of Congress at Washington, with more than four million volumes, the British Museum and the National Library of France are vast mines of statistical, historical, and other types of data ready for use by the sociological investigator. The utilization of collected data is nearly always easier than that of field data, since the former has already been assembled in some form, has often been tested and verified, and even classified and organized, and frequently has been given some sort of orientation for the guidance of the generalizer or of the one who wishes to apply it to the solution of some sort of practical or theoretical adjustment problem. The field sources, however, present their data in the raw ore and these data must be extracted, refined and standardized by skillful investigators before they are of much use for purposes of generalization or application. This is probably the reason why field investigation is generally regarded as a higher type than museum, documentary or other literary investigation. As a matter of fact the final results of field investigation may be no more, or even less, trustworthy or useful than researches among collected materials. There is also probably something of the romance and glory of pioneering in field research that appeals to the human mind with its reminiscences of and leaning toward a life of action.

Testing, Verifying and Defining Data

The processes of testing and verifying data are really methods of measuring, defining and standardizing these data. The process of defining involves a comparison of the new datum with previous data and this results in its preliminary classification or identification. This process of identification may occur for data without raising the

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question of their validity, if they belong to the field of abstract or symbolic data. Only in the case of the objects of the material environment does the process of defining by comparison and identification constitute also a proof of validity. Any datum which has passed into the category of the symbolic and is therefore a matter of tradition, of literary or other historic record, is subject to further confirmation by the recurrence of events, by laboratory or logical test, or by documentary verification and validation. In order to facilitate the process of validation and verification of symbolic data various forms of record and of confirmatory attestation, such as statistical record of results with the crude data accompanying, the publication of confirmatory researches, and the employment of witnesses are made use of. Where the data consist of inferences from laboratory experiments or from any other form of direct observation, records of confirmatory experiments and observations are necessary. Even when the method of definition is that of direct physical measurement, so great is the unreliability of the human senses and of human perceptions, that confirmatory measurements are necessary. Where, as in the social sciences, reliance must be placed on less accurate methods of observation, such as counting items, observing forms of behavior, recognizing or remembering words and statements, mathematical computations, or inferring meaning or intention, it becomes doubly necessary to employ the testing and verifying processes of multiple observation and some sort of distributive and discriminatory technique of record making and of record transcription. The farther the processes of observation depart from the relatively direct simple processes of direct sensory perception and physical measurement the more difficult the process of the definition and validation of data becomes. This is one of the chief reasons why research in the social sciences has been relatively so difficult in comparison with research in the physical and the biological sciences, where, until recently, it has been possible actually to see and in other ways secure relatively direct sensory contact with the objects being investigated. The other, major source of difficulty in social science investigation is the greater difficulty of finding a mathematics of generalization of the abstract and invisible data of a frequently inadequate sample in the field of social phenomena.

The actual methods used in defining and testing social facts historically and in the present have varied from the most crude

forms of observation and analogy to the most sophisticated methods of testing and sampling of recent investigational procedures. It is now generally known that people are not born with the power of recognizing and identifying even the simplest physical object. Even those physical attributes of size, shape, weight, hardness, smoothness, etc., become a part of our perceptions only through the process of conditioning our responses to such stimuli on the basis of previous sensory experience. The verbalization and objectifications of such sensory experiences had to await the development of language in the race experience and must still follow upon the development of language in the individual experience of the child. The more abstract data of the social world can receive definition only as they can be symbolized in some form, preferably in verbal language, and thus come to have abstract *meaning*. Here, as in the realm of more concrete facts, the process of recognizing and defining the fact is one of conditioning the responses—in such cases, verbal responses—which are to be tied up with previous inner responses or meanings. In such a manner one builds up a system of meanings to which all new data must be assimilated or conditioned in order itself to have meaning. Society, acting collectively, also builds up standardized systems of meanings—definitions, principles, formulas, laws, sciences—which are published and gain universal currency among those who accept them as valid; and thus they serve as backgrounds to which all new experience of individuals are assimilated or conditioned in order themselves to acquire meaning or to have meaning projected into them.

This process of assigning meaning to new experience ordinarily occurs almost immediately and automatically in the simpler and more direct forms of experience; but in the more complex forms of experience the process of attributing meaning, that is, of conditioning the new experience to the standardized body of social experience on a verbal level, is often a slow and tedious one. And it is to this category that the definition and verification of facts and the generalization of principles and laws in social investigation belongs. In the uncritical processes of definition, verification and generalization of social data and principles of everyday life the processes are not so difficult, because they are not so rigorously accurate. But when these processes occur on the highly meticulous level of accuracy demanded by a science they become exceedingly difficult

and tedious, especially in the more abstract realms of social data.

It is evident from the preceding analysis that all perception of either concrete physical traits or of abstract social meanings is the result of experience, of learning, on the basis of the conditioning of responses, that is, of the assimilation of new experiences to the fund of old experiences. Locke called it the association of ideas. Herbart described it as apperception. We recognize it as sensory and symbolic conditioning. The earliest and most fundamental form of the identification and definition of data is therefore by analogy, and this use of the analogical method remains throughout all the more advanced procedures of testing and verification the fundamental and basic procedure, although it becomes increasingly complicated and abstract in keeping with the advancing complexity of its subject matter. The method of identification and definition by analogy is employed in both inductive and deductive procedures. Whether one attempts to develop a more abstract and general statement from a number of more concrete facts, or to segregate by logical analysis a concrete and specific datum from a more general and inclusive abstract principle or premise, the use of the analogical method, which is also the method of conditioning responses, or of assimilating the particular to the general, is always in evidence. Such methodological or investigational procedures as chronicling, historical research and verification, case analyses, the making of life histories, social surveys, the recording of quantitative data in censuses and in so-called statistical records are only more complicated and compounded processes of doing the same thing, whereby data receive their meaning or definition by a process of assemblage and assimilation to the larger body of data that have been standardized and verified or that are in process of being verified and standardized. In a dynamic field of experience, such as that interpreted by the functional social sciences, these processes of verification and standardization are in process continuously, and consequently the meanings of data are never fixed or completely conditioned. These investigational procedures are obviously also processes of classification and organization of data preparatory to generalization, which is the essence of orientation. The process of assimilation of new experience or data to the larger body of experience or data, and thus of giving meaning to the new datum, is also by the very nature of the reciprocal process just described a method of giving new

meaning to, or of revising the meaning of, the old body of data. And this is the initial process of generalization and orientation.

The Classification of Data

Thus we see that generalization may be said to begin with the classification of tested and verified data, or in fact with the classification of any sort of data. This is, perhaps, more or less equivalent to saying that classification is always from a viewpoint, is tendential. The metaphysical viewpoint holds that a classification is a verbal picture of a natural or universal order or schematization of data, that is, of facts as they occur in some absolute and unchangeable underlying natural order. It is the Platonic theory of the noumena, or underlying essences, of which ordinary visible facts are but the variable phenomena. Plato and the other absolutistic Natural Law philosophers evidently mistook the relative fixity of principles and laws for something inherent and unchanging in the universal system of "ideas" which they believe to underlie the visible world of phenomena. We no longer believe that there is such an absolutistic and unchanging metaphysical substratum to ordinary experience, although we do recognize that tested, verified, classified and organized science, which is the long time product of collective experience, is much more dependable or "true" than individual or incidental experience untested by the experience of others. That is why we insist on the submission of individual opinion and impressions to the test of science.

Scientific classifications represent attempts to put tested experience or science into some sort of organized form that will render these data available for the use of other investigators and for those who wish to make use of them for social control purposes. No classification can be permanent or fixed—not even if it is the collective product of many generations—, for, since man's relationships to environment cannot remain constant, neither can his way of looking at things continue to be the same. As his purposes change, so will his way of looking at the data of his experience be modified. Any classification of data is simply an attempt to look the data of experience into some sort of perspective so as to give the thinker control of his world, or of that part of it with which he has immediate concern. As his problems change, so will his perspectives

of facts, and hence his classificatory assemblages of data will be modified. Since the functional sciences represent in part classifications of data for orientation purposes, it is to be expected that one science will classify the same data differently from another science; and, furthermore, that the same science will use different classifications at different times and for different purposes. We may conclude, therefore, that the form and content of scientific classifications are always relative to the ends and perspectives of the scientists and to the functional organization of the sciences. The Platonic assumption of a fixed metaphysical substratum of knowledge must, therefore, give way to the experience of scientific relativity.

This fact has bearing upon the dogma that the terms of classifications must be mutually exclusive. Such an assumption is truer for the environmental than for the functional sciences, since the former must in large measure organize their data in the same plane of experience. But, since the functional sciences habitually organize their data about an adjustment or interpretation problem, their data lie in several planes and there is no necessity that they shall be mutually exclusive in character. Thus we may observe biological, psychological, chemical, physical, geological, and many other types of data being assembled for the purpose of interpreting some social situation or sociological problem. In the first chapter of this volume we observed a somewhat similar situation in connection with the classification of the chief sociological sciences. We found that these were in all stages of integration. Other classifications and integrations of data around problems had not yet developed to the point where they were recognized as separate sociological sciences, but remained as subsidiary divisions in recognized sociological sciences. We also saw that these special sociological sciences were in different degrees sociological, some of them belonging to other major scientific fields quite as much as or more than to sociology.

The classification of the major sciences has also presented a similar problem. Considered as environmental sciences, their fields are fairly distinct and they have even been arranged in hierarchies, by Comte, Spencer, Ward, and others, according to such criteria as concreteness or abstractness of subject matter, generality or specialness of viewpoint, etc. Considered from the functional standpoint, these territorial divisions break down in large measure and we find a new classification of sciences that can be arranged under the old headings

with the greatest difficulty, and then only by assigning each of the new sciences to the territory from which it draws the larger portion of its data. Even so, there is a strong tendency to break over such classificatory lines and to rearrange these functional sciences under such new categorical designations as will best characterize their techniques or their purposes. Thus, much to the scandal of the traditional scientific purists, we have a large group of engineering sciences, such as mechanical, electrical, chemical, sanitary, civil, social and industrial engineering; and, possibly, in time we shall add to these titles such others as mental, financial, political, religious and moral engineering. Again, categorizing in terms of ends instead of technique, we are beginning to speak of sciences of public welfare, social welfare, human welfare, animal welfare, child welfare, industrial welfare, economic welfare, mental welfare, and even of spiritual and moral welfare. Of course such categories are not as yet well recognized, partly because the functional integration of sciences is newer and therefore violates the puristic traditions, partly because this functional integration is much more difficult to accomplish than classification on an environmental or subject-matter basis, and partly because such integrations are much more relativistic and modifiable by nature and function and therefore it is more difficult to assign to them any definite and fixed classifications of data.

The Organization and Generalization of Data

No description of a science is adequate until it adds an exposition of its methods of generalization to those of definition, testing, verification and classification. Generalization is the major fruition of a science. It begins in classification, as a method of gaining perspective of data. It is completed when this new perspective of data is described, that is, is objectified in symbolic language, such as a descriptive organization, a principle, a law, or a formula. This is organization, and it is a creative process. Out of generalization come new data of science, which are condensed from the old data into compact and usable forms. That is, these generalizations can now be made the starting point for new classifications and generalizations, and this process can go on indefinitely.

The more compact and highly standardized and quantitative the generalizations are made the more effectively they can be used in

future processes of generalization and orientation. The general description is the least compact and exact, and the general principle and the law considerably more so. The formula is most perfect in its mathematical form and is completely usable in this form in further scientific organization. Quantitative generalization is, of course, the highest form of scientific generalization, because it is the most accurate and usable. But there are vast differences in quantitative generalization. When it makes use of homogeneous data, as is frequently the case in physics and chemistry, the process is relatively easy and the resulting formulas are correspondingly exact and usable. When, however, as is usually the case in sociology, generalization must be made from highly heterogeneous data, it is often a very difficult and uncertain process and the results are by no means uniformly dependable. They are approximate rather than exact. The result is that it is much more difficult to organize dependable new and highly condensed abstract data out of more concrete antecedent data and thus to advance to other more abstract generalizations or to applications in sociology and the other social sciences.

The use of heterogeneous data in generalization, as is habitually necessary in sociology, calls for the selection of a sample, which can never be fully representative. The problems of sampling are discussed in another chapter of this volume and will not be taken up here. The technique of generalization must itself be statistical when heterogeneous data are used. The result of the statistical generalization is always an average, a mode, a mean, or some other mere approximation which, stated either as principle, law or formula, is always merely tentative. In order to get a clear and understandable statement out of such a procedure the curve is unduly smoothed and the conclusion is bound to be oversimplified and somewhat misleading. Yet such a conclusion is by all means worth having. Even an informal statistical generalization based on random observation or on the more carefully constructed life history, case analysis or survey, is valuable, although the generalization in such instances is bound to be largely an impression or a guess by analogy into the light of past experience and observation.

The submission of the generalizing process to the rigorous logic of mathematics improves the chances of securing a dependable approximation even on the basis of an inadequate sample drawn from heterogeneous data. Physical laws and formulas are frequently

accurately descriptive of the whole field of phenomena, when these are homogeneous. This is never the case with generalizations of social phenomena. The law or formula is never descriptive of all of the heterogeneous phenomena. Yet such a law is useful, for it is possible to compute the variation of any particular fact or phenomenon from this artificial or approximate law and thus to locate the phenomenon in the general system of phenomena. If the social law itself could be made final—as is the case with the law of falling bodies, due to the use of the zero base of the vacuum for the computation of its formula—and not have to undergo constant modification with every application of new data, the statistical generalization would be a much more valuable base or norm from which to compute the location of each social event in a system of social order. But, lacking a zero base for computation of formulas, social laws must remain merely approximations—as indeed must most physical and chemical and biological laws—and we are compelled to make the best use of them we are able and strengthen them as we can by constant revision. This necessity is the justification for increasing numbers of statistical studies which explore the same field of social phenomena repeatedly.

Scientific Orientation and Prediction

Sociological generalizations at their best being merely statistical approximations, social orientation through social science therefore can never be wholly accurate or dependable. But it may be very helpful. This orientation has two aspects. On the theoretical side it is scientific prediction, and on the practical side it is social control. Both forms of Orientation may properly be termed application of the results of generalization, although usually only the practical application of social principles and laws to the control of social behavior is denominated applied sociology or applied social science. Lester F. Ward, however, used the term applied sociology in a sense more analogous to intellectual orientation or prediction. Both fields of sociological orientation are important, and are indeed closely interdependent. Social control is essentially dependent upon sociological prediction and theoretical prediction is being constantly revised and corrected in the light of the results of practical social control. In fact, if there were space available, it might be argued

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successfully that the only dependable type of experiment in sociology is that of watching the events and processes of society as they unfold naturally in the ordinary forms of social behavior. It might be contended reasonably that sociological laboratory experiments under artificially controlled circumstances so distort and recondition the responses of the subjects that the results are not of much value for sociological generalization or prediction and control. It is probable, therefore, that we shall continue to draw our most important and dependable data for generalization, and hence for prediction and social control, from rigorously controlled observation of social life at large. The making of realistic and dependable sociological data in the laboratory is probably not a great deal more dependable than the hypothetical or imaginative manufacture of them in the mind. In this respect sociological method differs greatly from physical science method, and the reason is that human beings are so much more responsive with inner changes—that is, so much more capable of being reconditioned—than are inanimate objects or lower living things.

The Plan of Part Two

A word of orientation should be offered with reference to the chapters that follow. While the general theme assigned for each of the fourteen chapters immediately following this chapter was "the sources of data and the methods of investigation and generalization" in the particular field of sociology considered in that chapter, it has not seemed necessary that each of these three aspects of the subject should have the same degree of emphasis in all chapters. In general, methods of investigation for the discovery of new data have been most stressed, since undoubtedly this subject is of chief contemporary interest. In a few cases methods of generalization have been particularly emphasized and in one instance—where the methods of investigation and of generalization in that particular sociological science did not differ especially from those in two or three other divisions of sociology—most attention was given to the sources of data. It is hoped that by means of such variations in emphasis in the several chapters a much better composite picture of the methodology of sociology has been presented than would have been possible by a strictly uniform method of treatment throughout. At the same time it has been the intention to give an adequate

picture of the methods employed in each separate division of sociology as it is now cultivated. While in large measure the same methods are employable in the several sociological sciences, there are some important differences in applicability and in actual utilization in the several fields. It is hoped that these have been brought out, sometimes by special mention and at other times by implication.

As might be expected, chief emphasis has been placed upon the statistical procedure in generalization, and two separate chapters on the application of and the results from this method have been included in the volume. There has been no intention, however, of disregarding the limitations of this method or of discriminating against other methods. The chapter by E. W. Burgess includes an adequate presentation and illustration of the case method. It is the purpose of the second part of the volume to give an adequate picture of the field and problems of sociological research, as it was the purpose of the first part of the volume to present the set up and general problems of the sociological sciences individually and of sociology as a whole.

BIBLIOGRAPHY

- Bain, Read, "Behavioristic Technique in Sociological Research," *Pub. Amer. Sociol. Soc.*, XXVI:155-164 (1932).
- Bernard, L. L., "The Objective Viewpoint in Sociology," *Amer. J. Sociol.*, XXV:298-325 (Nov., 1919).
- "The Function of Generalization," *Monist*, XXX:623-631 (Oct., 1925).
- "Scientific Method and Social Progress," *Amer. J. Sociol.*, XXXI:1-18 (July, 1925).
- "The Development of Methods in Sociology," *Monist*, XXXVIII:292-320 (Apr., 1928).
- "Some General Problems of Sociological Measurement," *S. W. Soc. Sci. Quart.*, XII:310-20 (Mar., 1932).
- "An Interpretation of Sociological Research," *Amer. J. Sociol.*, XXXVII:203-212 (Sept., 1931).
- "Sociological Research and the Exceptional Man," *Pub. Amer. Sociol. Soc.*, XXVII:3-19 (May, 1933).
- Bogardus, Emory S., *Making Social Science Studies* (3d rev. ed.), 1925.
- Chapin, F. Stuart, *Field Work and Social Research*, 1920.
- Ellwood, C. A., *Methods in Sociology: A Critical Study*, 1933.
- Elmer, M. C., *Social Statistics*, 1926.
- Technique of Social Surveys*, 1927.

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- Gee, Wilson, ed., *Research in the Social Sciences*, 1929.
Lundberg, George A., *Social Research*, 1929.
Odum, H. W., and Jocher, K., *An Introduction to Social Research*, 1929.
Rice, Stuart A., ed., *Statistics in Social Studies*, 1930.
——— *Methods in Social Science, A Case Book*, 1931.
Rice, S. A., and Brinton, H. P., Jr., "The Problem of Sociological Source Materials," *Pub. Amer. Sociol. Soc.*, XXVI:204-226 (1932).
White, R. Clyde, *Social Statistics*, 1933.

CHAPTER II

HISTORICAL SOCIOLOGY

I.

SCIENTIFIC generalizations to be thoroughly reliable must be based on data that are the result of a comprehensive and manifold examination of the phenomena that constitute the subject-matter of the given science. Sociology, in order to assure the adequacy of its generalizations and principles has examined social phenomena from various angles. Sociology particularly, among the social sciences, cannot possibly avoid the historical approach if it is to understand society in its details. This contention as to the importance of historical data is based upon, (1) the apparent and oft-experienced difficulty of the investigator in obtaining the necessary and appropriate perspective toward the social phenomena in certain cases where they are complex and widely dispersed, and then to allocate proper emphasis in investigation; (2) the inability of a given generation of investigators to overcome the time factor in analyzing social phenomena since these phenomena of necessity, in many cases, extend over several or many generations; and (3) the fact that social phenomena are fortuitous and in most cases cannot be experimentally produced, or repeated for purposes of further observation and checking.

A history that is thoroughly objective, and gives as complete an account as possible of what has actually occurred in human societies, provides data of great significance and usefulness to sociology. In a very real sense the historian, who observes the principles of scientific research, is a field worker for the sociologist.¹ He furnishes him with a store of social facts which are perhaps more valuable than any other set of facts in the inductive study of human society. In fact, history is the only source of data for the determination of the universal and timeless aspects of social life, for we cannot inspect modern life and expect to comprehend

¹ Barnes, H. E., *The New History and the Social Studies*, 329.

any of it fully on the basis of its contemporary characteristics alone. We need to have the record of the entire procession of human events, the experience of human groups at different times and under a great variety of conditions. The direct observation of social phenomena in a state of rest is not a sufficient foundation; it gives neither the requisite scope nor accuracy. There must be added a study of the development of these phenomena in time, that is, in history.² They must be observed in their dynamic and recurring aspects, and the sequences that they follow must be noted.³ Unless the vast available mass of historical data is used sociological principles will have an inadequate factual basis.⁴ Sociologists have not so far sufficiently capitalized this historical material for intensive sociological use.

Along certain lines the facts of history can be looked upon as experimental findings in a field where experimentation that involves large numbers of individuals, periods of time, or a degree of control over the subjects, is practically impossible. The past has been a great experimental laboratory. While the data available are not as accurate as could be desired, and the combination of causal conditions has not always been the one wanted, yet the experiments are there, and a proper collecting, writing and interpreting of history will give us the sociological material. Already much of great value and importance has been developed, and no special effort to make historical data available for sociological purposes has been made.⁵

This paper will concern itself with the sources and types of data available, the difficulties inherent in the use of historical materials now to be had, and the methods of collection and generalization.

II.

Any discussion of the sociological use of historical materials involves a distinction between the objectives in historical and sociological method as they examine those materials. Both history

² Langlois, C. V., and Seignobos, C., *Introduction to the Study of History*, 320.

³ Small, A. W., *Origins of Sociology*, 17.

⁴ Eliot, T. D., "Use of History for Research in Theoretical Sociology," *Amer. J. Sociol.*, XXVII:628 (Mar., 1922).

⁵ See my "Sociological Uses of History," *Amer. J. Sociol.*, XXXI:183 (Sept., 1925). Also Cobb, J. C., "A Study of Social Science Data and Their Use," *ibid.*, XXXV:90-91 (Jul., 1929).

and sociology are concerned with the development of human social life as a whole; hence the data of both are the same. History, however, devotes itself to acquiring and accumulating knowledge of the concrete events as they actually occurred in time and space. It is busy mainly with a description of the particular and unique characteristics of social phenomena and looks upon each event as something not repeated in space or time. In the past it has been true that history has concerned itself largely with happenings that were unusual. Sociology, on the other hand, studies the typical and the repeated traits and relationships of social phenomena with the intention of determining, where possible, not only uniformity and constancy but also cause or at least relationship. It seeks to discover the invariable relations of succession and similitude which things social bear to each other. The intention is to formulate generalized descriptions of types of social occurrences and state them as hypotheses, or, if possible, as laws of causation that hold good irrespective of time and space.⁶

Thus, for example, both history and sociology are interested in revolutions and institutions. But history is concerned with a detailed description of each revolution by itself, or it seeks to give a competent account of some institutional form in some given place or time. Sociology, on the other hand, is interested in the causes—social, economic, political, religious, etc.—of revolutions, their repeated characteristics, the common forms of behavior evidenced in them, the types of effects, and so on, the final objective being the ability to predict revolutions. It is also interested in institutions from the point of view of their common origins, causes, functions, component parts, evolutionary trends, and so on.⁷

III.

The data provided by modern historical writers are much more useful for sociological purposes than much of those of their predecessors. This present history bases itself not alone on the old formal and traditional sources, such as governmental archives,

⁶ Cf. Park, R. E., "Sociology and the Social Sciences," *Amer. Jl. Sociol.*, XXVI: 411 (Jan., 1921); Sorokin, P., "Sociology as Science," *Social Forces*, X:23 (Oct., 1931); Barnes, H. E., *The New History and the Social Studies*, 332.

⁷ Cf. Hertzler, J. O., *Social Institutions*.

dynastic records, royal decrees, diplomatic files, memoirs of military and political notables, papal bulls, and other documentary material often brought into existence with conscious intent to impress both contemporaries and posterity. It includes also all the available sources that reveal the private and common life of the rank and file, regardless of whether or not they are strictly of a documentary nature. Hence it is interested not only in biographies, letters, business records, newspapers and all other accounts of institutions and happenings, but also in the material reflectors of a people's life such as machinery, household equipment, attire and industrial techniques.

Therefore it uses not only conventional written records or chronicles, but any sources, regardless of their nature, that reveal social life. It has as its allies anthropology, ethnology and ethnography, archæology, comparative philology, comparative religion, folk psychology, and the histories of philosophy, religion, literature, and the arts. Such a study carries history back into what was once called "pre-history" and extends it to all social facts. The evidence of such history is often worth more than literary records, for the latter unavoidably reflect the personal equation of the writer in their treatment, limits or selection while an implement, a burial, pottery, curiously arranged stones, an inscription, proverbs, legends, a legal code, or business records are direct and impartial evidence. Moreover this latter evidence is often easier to interpret.

Furthermore, as history thus moves back and expands in its scope and treatment the resources available vastly increase, and the experience and experiment widen, giving us more assurance for our conclusions. Useful sources of sociological materials produced by anthropology and ethnology are those obtained from its accounts of the very early cultures, the paleolithic and neolithic as well as the recent and contemporary primitive peoples, the descriptions of given culture traits, especially social institutions, folklore, legends and myths, religious beliefs and practices, the behavior patterns of primitives, past and present, bound up with various social stimuli and social situations, a whole array of social psychological phenomena, ceremonials, forms and rites, social beliefs, intellectual attitudes, various social processes, forms of social organization and their relation to different aspects of their surround-

ing physical and social environment, and a great array of data regarding the evolution and diffusion of culture.

Archæology with its actual artifacts, its architecture, public and private, and other relics of human ingenuity of the distant past, such as tombs and tomb inscriptions, correspondence, commercial and legal records in clay or stone tablets such as those of Egypt and Babylonia, oftentimes enables us to reconstruct a better picture of the life of man in the earlier periods than can be pieced together from later written sources. It takes us back to the threshold of organized human life.

The ancient civilizations of the Orient and Near East, like the pre-historic, give us only a limited amount of material, even though we use both the archæological sources and whatever chronicles there are. There is so little material that there is little possibility of discrimination; we must take what we can get and make the most of it; comparisons and checks can only occasionally be made. And yet, despite the paucity of material, social situations are presented that serve as excellent case material. There are data regarding most rigorous processes of social selection and adjustment, changing social systems with much light on the causes of the changes, cross-fertilized cultures, race problems, and the effects of economic changes.

When we come to the civilizations of Greece and Rome our sources are more numerous, but more complicated, more specialized and more difficult to interpret. We have not only the later histories as sources but the more or less contemporary works of Herodotus, Thucydides, Strabo, Diodorus Siculus, Polybius, Cæsar, Livy and Tacitus, which give much material of value, though it is difficult to use for sociological purposes. The available methods, however, in the use of these classical materials reveal an amazingly extensive store of information on the influence of the physical environment on the social and thought systems, in the case of Greece the evolution of groups from tribe to city-state, the transition from a pastoral and agricultural economy to an urban commercialism, the shifting of social systems, the building of classes, the development and decline of institutions, the expansion, conflict and fusion of cultures, social deterioration and its causes. The history of Herodotus especially gives us intimate accounts of the peoples with whom contacts were made in the Persian Wars, and in Egypt, Scythia,

Thrace, and Ionia. There are comments on the geographic environment and the effect of environment on the customs and industry of the people, comprehensive descriptions of the customs, institutions, and habits of the people, especially the institutions of marriage, education and slavery. Tacitus in the *Germania* describes in considerable detail the forms of social organization, the customs, habits and manners, the legislation and forms of punishment, the class relations, the social traits, and incidentally many of the institutions of the Germans. Most of the contemporary works are devoted to accounts of the politics and the military encounters of the times.

In the Middle Ages Europe makes a new series of contacts with the surrounding world, and itself advances from a simple, relatively barbarous culture to the heights of civilization. German, Frank and Norman, Greek, Jew, Arab and Mongol play their part. Here is abundant evidence of the results of contact through war and conquest, the development of the means of communication, and the expansion of trade and commerce. Here are racial fusions and exclusions; the intensifying and mixing of cultures. During this period occurs the breakdown of kinship and the rise of political institutions, the rise and fall of feudalism, the coöperative village community and its social effects, the building of classes and strata, the rise of the guild system, the profound modification of all institutions, a great variety of social psychological phenomena bound up especially with pilgrimages, the crusades, religious manias and other crazes and hysterias stimulated or induced by the new contacts, the nature and effects of the region-wide domination of one institution, the church, on the life as a whole, the rise of cities as economic, artistic, intellectual and religious centers and the effects of this. In the non-European world there is especially the spread of Islam from western Europe and northwest Africa to India and the contacts, conflicts, fusions, and a whole array of other effects incidental thereto, and the rise of the Mongol Empire, the most extensive up to that time, with its multiple phenomena of change and adjustment.⁸

⁸ Such a comprehensive bibliographical work as Paetow, L. J., *A Guide to the Study of Medieval History* (Rev. Ed.), 546 pages of bibliography, suggests innumerable—almost illimitable—sources of classified information and data along a great variety of lines.

When we come to modern times the history becomes much better and the materials and sources exceedingly numerous and infinitely diverse. Regional and national history becomes world history. Every conceivable form of social phenomenon is observable including some heretofore unknown. Stupendous technical and economic changes have created a new social system. The materials for study are everywhere, and increasingly the whole world can be drawn upon for them. The forces and processes involved can be more readily determined than ever before. The utilization of this wealth of material rests upon the development of an effective sociological method.

Any material from the past that reveals typical, demonstrable characteristics of societies or of interacting individuals is of significance if it can be compared and classified, and if a characteristic uniformity can be formulated. It may range from data respecting the most isolated and intimate personal relations to great social movements involving classes and even races in crazes, revolutions, migrations, and resulting in great modifications of social systems and cultures.⁹

IV.

Various difficulties must be faced, however, as one attempts to use the historical materials *now existent* for sociological purposes. In the first place, sociology does not have a distinctive set of historical data for sociological study; not much history has been written from the sociological point of view. The available histories have been compiled and written by historians dominated by the conventional objectives of history. Much of it is good history and useful for many purposes, but the sociologist often has great difficulty in getting what he needs out of it. It lacks sociological orientation and interest.

From the sociological point of view most of the history now available has paid most attention to the least significant aspects of social phenomena. It has overemphasized the unique and spectacular characteristics and neglected the most fundamental of all—

⁹ For a most comprehensive array of historical materials, carefully classified by countries and briefly described see Allison, Fay, Shearer, and Shipman, eds., *A Guide to Historical Literature*, 1931. What is needed, of course, is a similar guide with the titles arranged with reference to their sociological uses.

the routine life of peoples,¹⁰ and the relations of the occurrences that constitute this life.

In the second place, most of the available history is fragmentary and partial, and whatever conclusions it does draw are based upon broken and scattered data. It is a picture of the past made up of only parts of a mosaic. This has been and still is largely unavoidable. The life of man in the past is so vast that the historian has to select and devote himself to that which interests him, and emphasize that which he deems most important. One historian will differ from another in this respect.¹¹ Moreover, the books and documents, the archæological materials and all other recordings of the past upon which the historian bases his statements fall short, necessarily, of recording all that has happened. The historian, therefore, has to make a selection in these respects also, and fill in the gaps between his evidence as best he can. Hence history usually and unavoidably gives an incomplete view of the past. Its outlines at best are rough and approximate.

In the third place, the usefulness of the history for strictly scientific purposes is impaired by the fact that the ordinary human weaknesses of its writers are reflected in it. The personal equation of the writer looms so large. The indispensable conditions to scientific knowledge—purely objective observation, calculation, and measurement—are almost completely lacking in this field.¹² Not only are the documents often few, and weak in necessary data, but they are the result of a subjective interpretation of events. In fact, those who record and interpret history are, in the very nature of the case, guided to undertake the history of a particular happening, person, institution, era, or nation, by their preconceived interests and their pre-suppositions. They are further unconsciously influenced by their preoccupations, convictions, prejudices, biases, and general social environment. For example, many of the historians of the past have been members of the educated and privileged classes. Thus historical writing almost invariably and unavoidably is a synthesis and interpretation from a particular point of view.

¹⁰ Cf. Teggart, F. J., *Prolegomena to History*, 24; Rignano, E., "Sociology, Its Methods and Laws," *Amer. J. Sociol.*, XXXIV:441 (Nov., 1928).

¹¹ Becker, Carl, "Some Aspects of the Influence of Social Problems and Ideas upon the Study of Writing of History," *Amer. J. Sociol.*, XVIII:641-7 (1912).

¹² Pirenne, H., in Rice, S. A., ed., *Methods in Social Science*, 443.

Another difficulty grows out of the fact that history to date rests largely on documents. Two weaknesses of documents must be mentioned. The documents produced by contemporaries often are lacking in the accounts of those aspects of the life of the time that were so usual and familiar to these contemporaries. Their very immersion in their time made them myopic regarding it. Later producers of documents, attempting to correct this deficiency, lack concrete material and have to piece together their conclusions from inadequate hints.¹³ There is profound truth in the biting remark of Voltaire that, after all, history is only a pack of tricks we play on the dead. We must conclude, therefore, that history unavoidably includes an accumulation of subjective viewpoints and errors, and hence may be loaded.

A fourth complicating factor in the use of historical materials for sociological purposes is the fact that historical occurrences along a given line show ever-present and constant process which makes it difficult to detect uniformity. There is a never-ceasing appearance of new contents, new values, new functions, new conditioning factors. In the field of institutions, for example, a guild organized for technological reasons becomes eventually a social or political factor; a charity organization becomes a mighty political machine; an institution created to regulate the relations of the sexes becomes largely an economic agent.

A final difficulty inheres in the nature of historical phenomena themselves.¹⁴ While, as Cheyney has pointed out,¹⁵ "Human history, like the stars, has been controlled by immutable, self-existent law," this regularity is very difficult for the historian to determine. He cannot recall the antecedents of an historic event and make them exist again. Furthermore, since every historical happening has a complex of antecedents that might have participated in its causation, it is exceedingly difficult to determine which had decisive influence. The "trends" and "tendencies" portrayed in histories are based necessarily upon a selection of facts, and this precise selection may not adequately reflect all the conditions.

¹³ Teggart, F. J., *Prolegomena to History*, 26. See also Elmer, M. C., "The Evaluation and Scoring of Community Activities," *Amer. J. Sociol.*, XXX:172-6 (Sept., 1924).

¹⁴ Cf. Schuyler, R. L., "Law and Accident in History," *Pol. Sci. Quart.*, XLV: 275-78.

¹⁵ Cheyney, E. P., *Law in History and Other Essays*, 1927, p. 8.

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Now what must be concluded regarding the sociological use of historical materials in view of these difficulties? First it may be said that history can never be organized into an exact science, since it must forever rest upon scattered, highly precarious, and partially uncheckable data.¹⁶ But even as it is, it may yield truths of vital importance. On the other hand, we may develop a much better history for sociological purposes than now exists. I believe we will. It will not be much like the present so-called "social" histories. These offer no great advantage to sociology since they deal so largely with aspects of life of no great significance in developing a comprehensive knowledge of society. The food and the menus, the furniture and other equipment, the manners and everyday habits, the fairs and revivals, properly and adequately described, are of significance, but we need to get at the more fundamental and deep-seated aspects of social life.

Historical writing usually is a study embodying a selection of materials and an interpretation of the past in terms of and in conformity with present interests. As new needs or problems or viewpoints appear we must turn to heretofore unused aspects of the past or undeveloped data regarding it in order to understand them. Each age and each special interest group makes its own best history, for no historian can foresee the needs for different types of historical materials that the future will demonstrate. Sociology will be doing nothing extraordinary if it develops its own historians—men trained in historical method, but at the same time having the training in social theory and in the use of the generalizing aids (especially statistics), that will enable them to produce the studies that sociology requires. This history will not only be accurately descriptive but will also be analytical, even keeping in mind the aspects of the past about which sociology needs information. We now have historical sociology; really to give it substance we may have to develop sociological history.¹⁷

V.

What is the nature of the method to be employed in utilizing historical data for sociological purposes? This is exceedingly im-

¹⁶ Robinson, J. H., *The New History*, 1912, pp. 54-55.

¹⁷ See also Hart, H., "Science and Sociology," *Amer. Jl. Sociol.*, XXVII:370-1 (Nov., 1921).

portant, for the secret of the sociological significance of historical material lies in the uses made of them. This method cannot be a simple, automatic procedure, nor can it be used successfully by the untutored.¹⁸

The case method is the core of the sociological procedure.¹⁹ Historical cases are scientific data. There is no other method that can treat of historical data, for it alone provides the essential order and consistency in the field. The single events or situations of a certain type provide the material from which certain common elements or factors may be abstracted for comparison and summarization.²⁰ A number of similar cases are examined both on the basis of spatial distribution and time sequences.

The argument may be raised that such a use of the case method in history is unscientific in that its unit of inquiry is an event, while the datum of science usually is a material entity. But this is an illusory distinction, as Rice points out, for any change involves both a change in material things and occurrences that take place in time. Thus so-called scientific occurrences represent changes of similar or analogous character to those of historical inquiry.²¹

While no two historical events can be exactly alike, it is equally true that no two events in any field can be exactly alike. The soundness of the generalization rests *not* upon a complete identity of characteristics, which is unthinkable, but upon the soundness of one's method of classifying or grouping the events—a wholly pragmatic process. The primary need, therefore, is for the sociological historians to define their "events" in such a way that they may be classified and then to find a sufficient number of events in question to generalize upon. That this can be done is evident.²²

Such case studies, if all the factors can be determined and given due weight, produce very nearly as dependable results as an experi-

¹⁸ Cf. Small, A. W., *Origins of Sociology*, 108.

¹⁹ Cf. Rice, S. A., *Quantitative Methods in Politics*, 35-47.

²⁰ T. D. Eliot states, "Every historical episode, however inconspicuous, is also a social event and a social cause, and therefore, a unit of investigation subject to sociological analysis and interpretation." Again, "Either all happenings involving socii are capable of being analyzed, classified, and clarified by means of existing formulas and methods, or the scope of so-called sociological laws and methods should be so enlarged as to make this possible." "The Use of History for Research in Theoretical Sociology," *op. cit.*, 628-629.

²¹ Cf. Rice, S. A., *op. cit.*, p. 37.

²² On the case method see Bernard, L. L., "The Development of Methods in Sociology," *Monist*, XXXVIII:306-8, 314 (Apr., 1928).

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ment. Of course, the case method is still a relatively crude scientific technique, and the method of using it in connection with historical data is perhaps the least developed of its applications. But it offers possibilities. It must develop standardized units, and sound means of determining and recording usable historical data.²³ Then a careful and formal statistical technique must be used to arrange items or attributes, control the variables, determine the common elements, repetitions or constancy of relations, facilitate comparison, correlation and summarizing. Only when this is done do the facts point to the causal factors and uniformities, and hence make prediction possible.

The success of the case method also depends upon the completeness and accuracy of the diagnosis made of each event or case. This is just another way of saying that the success of our case method rests upon the proficiency of our historical method in accurately and comprehensively describing the social situation, episodes, processes, and institutions that constitute the case material. The first step in the sociological analysis of historical data then must be to secure as perfect a description of the events or cases as possible. All the general requirements and precautions of the best historical method must be kept in mind in this connection such as an examination of the genuineness of the sources, completeness and impartiality of the descriptions with special reference to the accuracy of the details, the availability of the historical composite, that is, the conjoined descriptions or observations of several competent witnesses or investigators, and the presence of means of adequately and critically checking the data. This is an art for which no absolute rules can be laid down. The sociologist, particularly, must be warned to look for the facts themselves regarding types of social situations, and not for illustrations for previously assumed conclusions. He must be careful to distinguish between acceptable evidence and broken, isolated and doubtful hints or suggestions. At the same time, in his zeal for the general and uniform he dare not overlook the samples of the unique and localized in the past either. He must also be careful not to extract the cases studied from their cultural setting in such a way as to destroy their essential meaning.

²³ Cf. Lundberg, G. A., *Social Research*, 168-196; Odum, H. W., and Jocher, K., *An Introduction to Social Research*, 210-243.

When he starts to work on his historical cases the descriptive data must be as complete and honest as possible.

Using the case method and observing all of the principles just enumerated will not, however, immediately give us statistically reliable data about the past and our data are not completely objective and scientific until they are statistical.²⁴ Some of the most important aspects of the past, such as laws, customs, religious and social conditions, only allow the application of the most general and informal statistical principles. Some historical facts will always escape complete schematization. In the future, however, there will undoubtedly be much more statistically usable material about the past, for events are now increasingly presented in that manner.²⁵ Increasingly we may also develop means of restating old historical data in a statistically usable manner, and also of arranging and stating new data about the past in such form. As other methods of discovery develop we will be able to apply them in the analysis of historical materials. We are dealing here with another of sociology's more or less undiscovered countries.

BIBLIOGRAPHY

- Bernard, L. L., "The Development of Methods in Sociology," *Monist*, XXXVIII:292-320 (April, 1928).
 Dunning, W. A., "Truth in History," *Amer. Hist. Rev.*, XIX:217-229 (Jan., 1914).
 Eliot, T. D., "Use of History for Research in Theoretical Sociology," *Amer. Jl. Sociol.*, XXVII:628-636 (Mar., 1922).
 Hertzler, J. O., "Sociological Uses of History," *Amer. Jl. Sociol.*, XXXI:173-198 (Sept., 1925).
 Johnson, Allen, *The Historian and Historical Evidence*, 1926.
 Langlois, C. V., and Seignobos, C., *Introduction to the Study of History*, 1925.
 Odum, H. W., and Jocher, K., *An Introduction to Social Research*, 1929, pp. 210-243.
 Ogburn, W. F., "The Historical Method in the Analysis of Social Phenomena," *Pub. Amer. Sociol. Soc.*, XVI:70-83 (1921).
 Ogburn, W. F., and Goldenweiser, A. A., eds., *The Social Sciences and their Interrelations*, 1927, pp. 218-233, 380-384.
 Park, R. E., "Sociology and the Social Sciences," *Amer. Jl. Sociol.*, XXVI:401-424 (Jan., 1921).

²⁴ Cf. Ogburn, W. F., and Goldenweiser, A. A., *The Social Sciences*, 380. d., 381-2.

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- Rice, S. A., ed., *Methods in Social Science*, 1931, pp. 435-445, 468-479.
Small, A. W., *Origins of Sociology*, 1924.
Sorokin, P., "Sociology as Science," *Social Forces*, X:20-27 (Oct., 1931).
Westermann, W. L., "Sources and Methods in Economic History,"
Polit. Sci. Quart., XXXVII:69-74 (Mar., 1922).

CHAPTER III

BIOLOGICAL SOCIOLOGY

BIOLOGICAL sociology may be considered as that field within which biological and sociological factors find a common ground. Whenever biological problems are analyzed in terms of social factors, they fall within this field. Similarly those phases of sociological investigation which emphasize biological factors may be so classified.¹ Within recent years there has been an increasing number of studies which may be subsumed under this general heading although many of them have been made by other than professed sociologists.

I. In any discussion of method, one of the foremost questions deals with sources of data and methods of collection. In a peculiar sense the biological sociologist has found much of his data already at hand for his manipulation and analysis. The United States Bureau of the Census compiles vast masses of statistics on many aspects of population, including detailed studies of mortality and other vital statistics, which are becoming increasingly comprehensive and increasingly accurate. The leading countries of the world collect similar data and many of their records are of long standing and hence particularly valuable for comparative purposes.² Recently comprehensive statistics compiled by the International Labour Office have also become available. State and local compilations furnish similar data for smaller areas. One must carefully guard against possible errors in these local sources, however. Such data have particular importance in that studies of smaller

¹ See Thomson, J. Arthur, "Biological Contributions to Sociology," *Sociol. Rev.*, XV:85-96 (1923); Hogben, Lancelot, "Social Biology," *Nature*, CXXVI:705-706 (1930); Huxley, Julian S., "Biology and Sociology," *Monist*, XXXIII:364-389 (1923).

² Among such sources of data are the following publications:
Official Yearbook of the Commonwealth of Australia
Annuaire Statistique de la France
Statistisches Jahrbuch für das Deutsche Reich
The Registrar-general's Statistical Review of England and Wales
Statistisk Aarbog for Kongeriget Norge
Statistisk Årsbok för Sverige

areas often bring out facts and relationships which the results obtained from larger areas tend to conceal. Extensive use has been made of the records of departments of health in particular.

Questionnaires and schedules which are sent to a group of individuals or which are filled in by the investigator as the result of a personal interview are particularly pertinent for studies that call for any type of genealogical material or for use in research problems utilizing other types of specialized family data, provided one is aware of the pitfalls for the naïve investigator. No matter what the field the general problems of sampling are to be faced as the results may not be true samples and the answers themselves are frequently inaccurate.

Case studies³ where carefully treated offer a possible source of data for detailed analysis of the relationships of biological problems and social factors. The scientist in search of materials which can be placed in comparable form must not forget that the case worker has developed a technique which has been adjusted to the situations faced, and as such is not designed primarily for general scientific analysis.

Genealogical records⁴ offer a fertile field for the biological sociologist, subject to his interpretation. Where analyzed by individuals with insufficient training, the conclusions may, however, not take all contributing factors into account.

Tests and measurements have been a popular means of obtaining data and there is a mounting accumulation of studies of intelligence correlated with some more or less social factor. In many cases the records of schools are at the disposal of investigators. On the other hand it is usually not difficult to secure the coöperation of school officials if the investigator wishes to give tests himself. Much use, not always wise perhaps, has also been made of the tests given to the drafted men in the World War.

Records of social agencies as they become more systematic and extensive will also assume greater value in the eyes of the biological sociologist. At present there are various organized efforts to put such records on a comparable basis.

³ For example, see Spiller, G., "The Dynamics of Greatness," *Sociol. Rev.*, XXI:218-232 (1929).

⁴ Kässbacher, Max, "Genealogical Methods as the Basis of Research in Human Heredity," *Human Biol.*, II:250-263 (1930).

To this list theoretically may be added the various types of experimental data which the individual investigator may collect. So far the possibilities have had more promise than fulfillment.

II. The methods employed in the treatment of bio-social data may be considered at this point. For purposes of discussion the various types may be subsumed under four general divisions. These are

- I. The historico-logical method
- II. Tests and measurements
- III. The statistical method
- IV. The experimental method

The Historico-Logical Method

Much of the pioneer work in biological sociology comes under this category. There were early attempts, as a reverberation of Darwin's theories, to analyze society and its parts in terms of biological analogy. Herbert Spencer⁵ and Paul von Lilienfeld⁶ have been two of the most brilliant exponents of this form of social analysis. Jacques Novicow⁷ and René Worms⁸ are other representatives of the organismic approach to the study of society.

Within this same methodological grouping fall the surveys of the racial question. Early protagonists of the superiority of the Aryans were Gobineau⁹ and Chamberlain¹⁰ with their detailed historical bases. Two recent books which have critically pointed out the fallacies of the "Nordic" doctrine, though using the same general type of methodology, are *Race and Civilization* by Hertz¹¹ and *The Racial Basis of Civilization* (1926) by Hankins.

Many of the more specific studies dealing with race, while perhaps employing other methodologies to some extent, fall in general under the category of historico-logical where the treatment is primarily of a qualitative nature developing some thesis or observa-

⁵ *The Principles of Sociology*, Vol. I, Part II.

⁶ *Die Menschliche Gesellschaft als realer Organismus*, Vol. I, Mitau, 1873.

⁷ *La critique de Darwinisme sociale*, Paris, 1910.

⁸ *Organisme et société*, Paris, 1896.

⁹ *Essai sur l'inégalité des races humaines*, Paris, 1853-1855.

¹⁰ *The Foundations of the Nineteenth Century* (John Lees, tr.), 1911.

¹¹ Tr. by Levetus, A. S., and Entz, W., 1928.

tion.¹² Reuter, largely utilizing this approach in *The American Race Problem* (1927), has produced one of the best surveys of the American Negro. D. Young has made the same general type of contribution in his *American Minority Peoples* (1932).

The eugenist has done much to further the development of the biological approach to social questions. In addition to his quantitative studies, there are many contributions which employ little quantitative material but rather present the eugenic platform in logical fashion.¹³

The historico-logical method cannot be dismissed as unscientific even though the rigorous categories of more precise techniques are missing. After all, historical results, even where statistics have not been employed, compare favorably with such techniques. In the bio-social approach, the historico-logical method has resulted in an important body of knowledge and to a large degree may be considered valuable, less for the specific results achieved than for developing a body of theory and for opening up fields for more precise studies.

Tests and Measurements

The utilization of tests and measurements has begun to be explored both intensively and extensively by investigators who are accumulating a significant body of data on the relationship of intelligence with various factors either social in themselves or with significant social implications when subjected to careful analysis. The general criticism may be made that there has not been sufficient reference to control groups on the one hand and to the influence of important but disregarded factors on the other. Again the number of cases may be too limited.

In the recent efflorescence of studies of relative intelligence of race and nationality groupings,¹⁴ there has been much room for incautious speculation and interpretation of quantitative results

¹² See Shapiro, H. L., "Race Mixture in Hawaii: The Story of the Polyglot Inhabitants of Hawaii, with a Discussion of a Few of the Resulting Population Problems," *Natural Hist.*, XXXI:31-48 (1931) and Steward, G. A., "The Black Girl Passes," *Social Forces*, VI:99-104 (1927), for typical illustrations of this.

¹³ See various contributions by Conklin, Popenoe, J. Huxley, and L. Darwin.

¹⁴ For a summary of this movement, see Garth, Thomas R., *Race Psychology*, Ch. V, 1931. Also consult his comprehensive bibliography on experimental and statistical studies in race psychology, pp. 226-232.

with neglect of qualitative factors, in addition to the shortcomings of the tests themselves.¹⁵ It is only fair to add, however, that recent studies have been more critical than the early ones. Kirkpatrick's *Intelligence and Immigration* (1926) is an example of careful statistical treatment of test results for children of immigrant groups, supplemented by data supplied by teachers. The Goodenough intelligence test for young children, which is non-verbal, when applied to 2,457 public school children, revealed differences according to racial groups quite similar to those found in the use of verbal tests.¹⁶ On the other hand, Brunner¹⁷ in testing almost four thousand rural children found that the children of foreigners made practically as good a record as the native-stock children. Kimball Young has used the Army Alpha and Beta tests to investigate sex differences of American, South Italian, Portuguese, and Spanish-Mexican groups.¹⁸ The danger in all interpretations of tests of race and nationality groups is that the weight of social and cultural factors is not sufficiently understood.

Among the more careful investigations of Negro-white comparative intelligence¹⁹ may be cited Witty and Lehman's study of racial superiority²⁰ on the basis of the Army Alpha tests and tests of white and Negro pupils. They point out that individual differences always exceed "race differences." Using a battery of tests and intercorrelating the results, Bond found little correlation between intelligence and emotionality of Negro subjects.²¹

The most extensive tests of American Indians have been conducted by Thomas R. Garth or under his direction.²²

Another fertile field for the mental tester is that of familial rela-

¹⁵ For a criticism of existing tests, consult the review by Carl C. Brigham of "Intelligence Tests of Immigrant Groups," *Psychol. Rev.*, XXXVII:158-165 (1930).

¹⁶ "Racial Differences in the Intelligence of School Children," *Jl. Experimental Psych.*, IX:388-397 (1926).

¹⁷ *Immigrant Farmers and Their Children*, Ch. III, 1929.

¹⁸ "Sex Differences in Certain Immigrant Groups," *Jl. Social Psych.*, I:227-246 (1930).

¹⁹ For a summary of such research, consult the introductory discussion in James L. Graham's study, "A Quantitative Comparison of Rational Responses of Negro and White College Students," *ibid.*, I:97-120 (1930).

²⁰ "Racial Differences: The Dogma of Superiority," *ibid.*, I:394-417 (1930).

²¹ "An Investigation of the Nonintellectual Traits of a Group of Negro Adults," *Jl. Abnormal and Social Psych.*, XXI:267-276 (1926-27).

²² "The Intelligence of Full Blood Indians," *Jl. Applied Psych.*, IX:382-389 (1925); "The Intelligence of Mixed Blood Indians," *ibid.*, XI:268-275 (1927); and Garth, Thomas R., and Barnard, Mary A., "The Will-Temperament of Indians," *ibid.*, XI:512-518 (1927).

tionships. Chapman and Wiggins utilized both intelligence tests and the Chapman-Sims Socio-Economic Scale in a study of the relationships of family size, intelligence, and socio-economic status.²³ Hart investigated the problem of the increase in intelligence of children in Davenport, Iowa, if the less intelligent families had had as few children as the more intelligent.²⁴ Dawson,²⁵ in his tests of Scotch children, likewise found a direct relationship between lower I. Q.'s and larger families.

From the sociological point of view, attempts to determine objectively the relationship between intelligence of children and occupations and economic status of the homes represented are valuable. The work of Goodenough²⁶ resulted in the significant conclusion that intellectual differences between social classes were already well established in children of two, three, and four years of age.

Steckel,²⁷ Jones and Hsiao,²⁸ and Arthur,²⁹ among others, have investigated the relationship of intelligence and birth order. In her study of approximately 20,000 school children in Sioux City, Iowa, Steckel concluded that on the average the younger children in the families studied tested higher than the older children. The possible effect of the older children in supplying stimuli was not sufficiently taken into account.

In a recent study of the differential birth rate in rural New England, Conrad and Jones³⁰ utilized intelligence test results and social and biological data obtained through interviews, questionnaires, and records of the town. Partial correlation made it possible to hold various factors constant and measure more precisely the various relationships involved.

The methodology of tests and measurements is essentially that of administering tests, obtaining information concerning various factors more or less social in nature, and then seeking to determine

²³ "Relation of Family Size to Intelligence of Offspring and Socio-Economic Status of Family," *Pedagogical Seminary*, XXXII:414-421 (1925).

²⁴ "Familial Differential Fecundity," *Jl. Amer. Statistical Assn.*, XX:25-30 (1925).

²⁵ "Intelligence and Fertility," *Nature*, CXXIX:191-192 (1932).

²⁶ "The Relation of the Intelligence of Pre-School Children to the Occupation of Their Fathers," *Amer. Jl. Psych.*, XL:284-294 (1928).

²⁷ "Intelligence and Birth Order in Family," *Jl. Social Psych.*, I:329-343 (1930).

²⁸ "A Preliminary Study of Intelligence as a Function of Birth Order," *Pedagogical Seminary and Jl. Genetic Psych.*, XXXV:428-432 (1928).

²⁹ "The Relation of I Q to Position of Family," *Jl. Educa. Psych.*, XVII:541-550 (1926).

³⁰ "A Field Study of the Differential Birth-rate," *Jl. Amer. Statistical Assn.*, XXVII:153-159 (1932).

what relationships may possibly exist. The tremendous amount of time and effort that has been put upon tests and measurements in the fields touching man and his behavior is beginning to show results. In the field of biological sociology, the reaction of most sociologists towards the inadequate interpretations of the results of various tests and measurements is leading to less naïve and consequently more important conclusions. Any serious attempt at measurement is to be encouraged. Interpretations of results achieved call for adequate training in statistical methodology as well as familiarity with the various fields having a common focus in the material studied.

The Statistical Method

The data of biological sociology are such that it is inevitable that statistical methodology³¹ should predominate. An important group of studies methodologically is that which is based on anthropometric data. A pioneer work was Boas' study³² of the physical type of immigrant children with relation to possible but not satisfactorily proven changes as a result of altered environment. In this methodological group belongs Herskovits' measurement of more than five thousand American Negroes.³³

The biometric field has been developed primarily as a result of the work of Galton, Pearson, Elderton and their associates in England. The emphasis has been on the importance of the factor of heredity in their studies of nature and nurture, but the development of statistical tools has been of far reaching importance for social research in general. In Galton's *Hereditary Genius* (1869), the data are biographical in source and are analyzed to show the tendency of genius to "run in families."

Karl Pearson developed the mathematical foundation of the theory of correlation. His application of this and other quantitative methods has resulted in a large output of studies to support his emphasis on the importance of biological factors in society, an

³¹ Although tests and measurements utilize statistical techniques, their methodology is distinct.

³² *Changes in Bodily Form of Descendants of Immigrants*, 1912. Also see Boas' more recent paper, "Family Traits as Determined by Heredity and Environment," *Proceedings National Academy of Sciences*, XIV:496-503 (1928).

³³ For a detailed account of his method, see *The Anthropometry of the American Negro*, 1930.

emphasis that has at times resulted in biased and one-sided presentations. His techniques, when carefully utilized, however, form a preëminent contribution to the methodology of biological sociology.

Most extensive of all have been the demographic studies. Methodologically, the construction of curves of population growth and their projection into the future has been one of the recent lines of interest and research. Pearl, through the use of laboratory methods, has developed his "law of population growth." The Pearl-Reed curve, a logistic curve, has been widely applied.³⁴ Another method of predicting population has been that of combining individual biological elements in a curve and then extrapolating the result.³⁵

Studies of the birth rate must utilize refined techniques if they are to be accurate in their presentation of conditions. Statistics as published by census and health bureaus merely present crude birth and death rates. Kuczynski's³⁶ refinement of data in terms of fertility rates and net reproduction rates gives a more complete picture of what is happening to the populations studied. He makes no effort to analyze social factors *per se*, however, so that there is much room for sociological interpretation.

Various investigators have presented fertility data by social classes. In analyzing census data for England and Wales, Stevenson³⁷ found the difference in fertility rates to be fairly recent and to increase with descent in the social scale. By the use of correlation and regression equations in the manipulation of United States census data, Ogburn and Tibbitts also found birth rates increasing in relation to lower social class.³⁸ Excellent work has recently been

³⁴ See Pearl, Raymond, *Studies in Human Biology*, esp. Chs. XXIV and XXV, 1924 and *The Biology of Population Growth*, 1925, as well as numerous articles. Also see Yule, G. Udny, "The Growth of Population and the Factors Which Control It," *Jl. Royal Statistical Society*, LXXXVIII:1-58 (1925), and Knibbs, Sir George H., "The Laws of Growth of a Population," *Jl. Amer. Statistical Assn.*, XXI:381-398 (1926).

³⁵ Whelpton, P. K., "Population of the United States, 1925-1975," *Amer. Jl. Sociol.*, XXXIV:253-270 (1928).

³⁶ *The Balance of Births and Deaths*, I. Western and Northern Europe, 1928; II. Eastern and Southern Europe, 1931.

³⁷ "The Fertility of Various Social Classes in England and Wales from the Middle of the Nineteenth Century to 1911," *Jl. Royal Statistical Society*, LXXXIII: 401-432 (1920).

³⁸ "Birth Rates and Social Classes," *Social Forces*, VIII:1-10 (1929).

done by the staff of the Division of Research of the Milbank Foundation further substantiating these conclusions.³⁹

On the other hand Phillips⁴⁰ in his study of Harvard men and Edin⁴¹ in an analysis of data for Stockholm show higher birth rates among the more successful for the units studied.

Mortality statistics likewise must be analyzed in terms of the constitution of the population to present an accurate picture and to serve as a basis for comparison. A recent study of differential mortality rates of the white and Negro populations of Tennessee⁴² utilized approximately one million individual records of the Department of Public Health. Woodbury⁴³ has summarized the studies of the Children's Bureau in specific localities with regard to the relationship between various social factors and infant mortality. Utilizing partial correlation, Winston⁴⁴ has studied the relationship between educational status and infant mortality.

Other studies have analyzed census data through comparative percentages and tabular presentation in terms of specific population composition.⁴⁵

In addition to these generalized aspects of population, the bio-social approach has led to a number of quantitative studies in

³⁹ Sydenstricker, Edgar, and Notestein, Frank W., "Differential Fertility according to Social Class," *Jl. Amer. Statistical Assn.*, XXV:9-32 (1930); Sydenstricker, E., "A Study of the Fertility of Native White Women in a Rural Area of Western New York," *Quart. Bull. Milbank Memorial Fund*, Jan., 1932, X, No. 1; Kiser, Clyde V., "Fertility of Social Classes in Various Types of Communities of the East North Central States in 1900," *Jl. Amer. Statistical Assn.*, XXVII:371-382 (1932); Sallume, Xarifa, and Notestein, Frank W., "Trends in the Size of Families Completed Prior to 1910 in Various Social Classes," *Amer. Jl. Sociol.*, XXXVIII:398-408 (1932).

⁴⁰ "Success and the Birth-Rate," *The Harvard Graduates' Mag.*, XXXV:565-570 (1926-27).

⁴¹ "The Birth Rate Changes: Stockholm 'Upper' Classes More Fertile than the 'Lower,'" *Eugenics Rev.*, XX:258-266 (1929).

⁴² Sibley, Elbridge, *Differential Mortality in Tennessee, 1917-1928*, Fisk University Press, 1930.

⁴³ "Infant Mortality Studies of the Children's Bureau," *Pub. Amer. Statistical Assn.*, XVI:30-53 (1918).

⁴⁴ *Illiteracy in the United States*, Ch. XI, University N. C. Press, 1930.

⁴⁵ Jastrzebski, S. de, "Changes in Sex and Age Constitutions of Some Representative European Populations," *Jl. Royal Statistical Society*, XCI:231-249 (1928); Chaddock, R. E., "Composition of the Population of Continental United States," *Jl. Amer. Statistical Assn.*, XXVI:449-452 (1931); Whelpton, P. K., "Increase and Distribution of Elders in Our Population," *Proceedings Amer. Statistical Assn.*, 92-101 (1932).

rather specialized fields. One of these fields, which has been analyzed in the preceding discussion of fertility, is that of size of family. Related to such studies are those by Thompson,⁴⁶ Holmes,⁴⁷ Goodsell,⁴⁸ and Baber and Ross⁴⁹ which study size of family in relation to college data. In general the statistical tools employed are simple.

Sex-ratios have been a further field of investigation in the bio-social field. Punnett,⁵⁰ in a study of London data, analyzed the sex-ratio at birth according to three economic groupings. He found, moreover, that the proportion of males born was lowest in the poorest class, highest in the wealthiest class. Parkes⁵¹ has likewise made careful statistical analyses of British data while Newcomb,⁵² Schultz,⁵³ and Winston⁵⁴ have utilized comparable techniques in the study of American data from census and genealogical sources.

Various aspects associated with leadership have formed another more or less specialized field for quantitative study. Gun⁵⁵ has studied the kin of English genius utilizing the records of the *Dictionary of National Biography*. Margaret Thomas⁵⁶ has made a study of the same general type using questionnaires and the *Canadian Who's Who*.

Within recent years there has been a growing body of careful statistical studies of mental disease, based on the constantly improving

⁴⁶ "Size of Families from Which College Students Come," *Jl. Amer. Statistical Assn.*, XX:481-495 (1925).

⁴⁷ "Size of College Families," *Jl. Heredity*, 1924, 406-415.

⁴⁸ "The Size of Family among a Group of College and Non-College Married Women," *The Family*, XI:132-133 (1930-31).

⁴⁹ *Changes in the Size of American Families in One Generation*, University of Wisconsin Studies, 1924.

⁵⁰ "On Nutrition and Sex-Determination in Man," *Proceedings Cambridge Philos. Society*, XII:262-276 (1902-4).

⁵¹ "Some Aspects of Reproduction Considered in Relation to Eugenics," *Eugenics Rev.*, XVI:571-594 (1925).

⁵² "A Statistical Inquiry into the Probability of Causes of the Production of Sex in Human Offspring," *Carnegie Institute of Washington Pub.*, No. 11 (1904).

⁵³ "Studies in the Sex Ratio of Man," *Biological Bull.*, XXXIV (1918).

⁵⁴ "The Influence of Social Factors upon the Sex-Ratio at Birth," *Amer. Jl. Sociol.*, XXXVII:1-21 (1931); and "Some Factors Related to Differential Sex-Ratios at Birth," *Human Biol.*, IV:272-279 (1932).

⁵⁵ "The Kin of Genius," *Eugenics Rev.*, XX:82-88, 245-252 (1928-29), and I:253-262 (1930-31).

⁵⁶ "Hereditary Greatness in Canada," *Social Forces*, IV:305-310 (1925).

records of state hospitals, which make possible a more fundamental grasp of the social significance of this problem.⁸⁷

In the statistical approach, the methodology employed varies from the use of simple numbers and percentages to refined techniques which attempt mathematically to hold various factors constant, and in so doing, to approximate as nearly as possible the control methodologies of the more exact sciences. Of the four methods of approach discussed in this chapter, the various types of statistical treatment seem thus far to have most promise. Pitfalls for the unwary are inaccurate data, apparent differences which are due merely to chance, correlation coefficients or other expressions of mathematical relationship which are spurious due to either mathematical or interpretative fallacies. Complex data need at times simple treatment, at other times refined techniques. Finally, the most elaborate use of statistics will not compensate for inadequate knowledge of the data, including all possible affecting factors and patterns. The methodological trend is in the direction of more adequate, as well as wider, use of the statistical approach in this as well as in other fields of sociology.

The Experimental Method

The experimental method, as yet little utilized by the sociologist, offers various lines of bio-social approach. In so far as there is some social interpretation in connection with biological factors, we may legitimately include experimental data in the present discussion.

Lehman and Witty⁸⁸ administered the Lehman Play Quiz to more than 6,000 children in grades III to XII in the public schools of Kansas City, Missouri. As a result of their investigation, they concluded that in every age group Negro children were more social in their play than white children.

⁸⁷ For example, see the following studies: Malzberg, Benjamin, "The Prevalence of Mental Disease among Jews," *Mental Hygiene*, XXX:926-946 (1930); Popenoe, Paul, "Eugenic Sterilization in California, 6. Marriage Rates of the Psychotic," *Jl. Nervous and Mental Diseases*, LXVIII:17-27 (1928); Winston, Ellen, "Age, A Factor in the Increase of Mental Disease," *Mental Hygiene*, XVI:650-652 (1932); Nolan, W. J., "Occupation and Dementia Praecox," *The State Hospital Quart.*, New York, III:127-154 (1918); Pollock, Horatio M., "Dementia Praecox as a Social Problem," *ibid.*, III:370-375 (1918).

⁸⁸ "The Negro Child's Index of More Social Participation," *Jl. Applied Psych.*, X:462-469 (1926).

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While and Noetzel⁵⁹ studied a group of children in terms of birth order and groupings on the basis of records of explosive or withdrawn personality types, enuresis, and delinquency. Their results suggested that ordinal position was not especially significant in determining personality type.

Of particular methodological significance is the study of the effect of social environment on intelligence test scores published in *The Twenty-Seventh Yearbook* of the National Society for the Study of Education. In an analysis of the influence of environment on intelligence, school achievement, and conduct of foster children by Freeman, Holzinger, and Mitchell,⁶⁰ a group of foster children were tested prior to placement and retested after several years in foster homes. The children not only showed an improvement in intelligence scores but also those who were adopted at an early age gained more than those whose adoption took place at a more advanced age.

In common with other fields of sociology, the so-called experimental method has been little employed in bio-sociology. The reasons for this are, first, inadequate training in the technique of experimentation, second, the availability of a great mass of raw material that awaits utilization on the part of both the statistical and the non-statistical sociologist, and third, a healthy skepticism based upon the belief that the controlling of social factors has not been particularly successful thus far by those who have applied experimental techniques to the field of the social sciences.

BIBLIOGRAPHY

- Burks, Barbara Stoddard and Kelley, Truman L., "Statistical Hazards in Nature-Nurture Investigations," *Twenty-Seventh Yearbook*, National Society for the Study of Education, Part I, pp. 9-38.
- Pearl, Raymond, *Introduction to Medical Biometry and Statistics*, 1923.
- Peterson, Joseph, "Methods of Investigating Comparative Abilities in Races," *Annals Amer. Academy of Polit. and Soc. Sci.*, CXXXX: 178-185 (1928).
- Rice, S. A., ed., *Statistics in Social Studies*, 1930, Chs. II and V.

⁵⁹ "A Study of Birth Order and Behavior," *Jl. Social Psych.*, II:52-70 (1931).

⁶⁰ Part I, pp. 103-217.



CHAPTER IV

HUMAN ECOLOGY

MODERN invention has accelerated a world-wide mobilization of human beings, spatially and functionally. Social institutions may follow close at the heels of the migrant, calculating his buying power, or they may lag behind unable or unwilling to change their non-pecuniary pace. Human ecology is the modern name for the study which analyzes the processes involved in the spatial and temporal distribution of human beings and their institutions. This approach gives a new emphasis to the ground march of social phenomena, which may be indicated quantitatively in terms of land values, industrial invasion, occupation, race, age, sex, marital elements, or behavior phenomena. This point of view makes necessary a closer working relationship with the geographer, the economist, and the student of population, because it makes accessible for sociological purposes many data from these allied sciences and it necessitates the gathering of a body of data useful to the research students in these related fields.

Some of the Predecessors of the Ecological Point of View

Booth's¹ early study of London metropolitan areas contained by implication many aspects of the ecological approach. He observed population mobility, occupational and class segregation, family means and modes of living, poverty and dependency. He used maps, charts, graphs, and tables freely in locating and presenting the area spread of social phenomena. It remained for later students to modify research methods, define the processes and trace their operation in bringing about this diversification of urban areas.

The *social surveyor* in the United States had as his prototype the *muckraker* who drew public attention to the exploited and submerged tenth in the large cities. Both were interested in conditions which had been brought about by immigration and the concentra-

¹ Booth, Charles, *Life and Labour of the People of London*, 16 vols., 1889-1903.

tion of population in the larger industrial centers. But they did not trace their problems back to these natural processes.

The *muckrakers*, motivated by reformatory zeal, used the technique of impressionistic journalism in their efforts to arouse a mass response to their definition of the situation. The social surveyor did not break sharply with the muckraker but he did employ more objective methods in comparing population elements and social institutions within and between urban and rural communities. By implication he popularized the notion of looking at the *total situation* in an effort to locate and utilize the forces which might bring about a more fortunate condition in the communities scrutinized. However, the social survey at the peak of its popularity focussed attention on social action. The gathering and systematic organization of sociological facts were a mere by-product of the survey movement. This grand manner in cross-sectional examination contained little or no conception of process or of the concepts which would present the notion that communities and institutions have their own inevitable forms of *natural history*.

Long before the social survey movement came into prominence in this country the human geographers were observing the relation of human beings to their physical habitat. Their point of view was most fully developed in the geographic studies of Ratzel,² Vidal de la Blache,³ and Brunhes.⁴ Ratzel defined certain concepts which have come into vogue, particularly, *natural areas or regions*, *natural boundaries* and *position in space*. Ratzel's unit of investigation was the natural area as distinguished from the artificially defined political area. Brunhes, pursuing the lead of Ratzel, subjected the well-defined natural regions—the "island of the desert" and the "island of the high mountain"—to systematic study and clearer definition. Both Ratzel and Brunhes defined an area's boundary as the line at which one type of phenomena ceased and another type commenced. Similarly, Ratzel defined position in a dynamic rather than in a static sense; it was indicative of the trend of relationships between vicinal regions or groups of people. These human geographers were cognizant of the distribution of population units and social phenomena with reference to natural regions and they sought

² Ratzel, Friederich, *Anthropogeographie*.

³ *Principles of Human Geography*, 1926.

⁴ *Human Geography*, 1920.

to represent these facts by density, language, political maps, and charts of settlement routes. To a very great degree they were aware of the ground march of human phenomena, although the definition of the processes by which human beings and their institutions came to form typical patterns in space and time awaited the special researches of human ecologists at a later date.

The studies of the *plant and animal ecologists* have become conspicuous since the beginning of the present century, though the ecological movement can be traced back to Darwin and his research followers. Professor Eugenius Warming, the father of modern plant ecology, published his work on Ecological Plant Geography in the late eighteen-nineties and his work on plant ecology some years later.⁵ More recently there have come to us: Wheeler's study of animal ecology,⁶ and Clement's work on plant succession.⁷ Warming observed that plants occupy fairly well-defined physiographic areas. Within these areas plants of like and different species are distributed in typical patterns or formations. While there is no clearly defined division of labor in the plant community, this condition is approached in those constellations in which several species of plants occupy a single habitat. Competition is reduced as the light, heat, and nutriment demands differ and as these species are of service to each other in terms of soil protection, shade, and other forms of reciprocity. This natural dependence and reciprocal influence of different species in a given community, whether of plants or animals, is known as *symbiosis*. Warming anticipates the notion of *dominance* in his claim that very often in the complex plant community, one (or more) species stands dominant in the formation, and if it is destroyed the whole community disappears.⁸

The ecologists also defined the processes by which plant communities emerge and change in reference to food, space and time factors. Clement discussed plant migration and colonization and described in great detail the processes of *invasion* and *succession*. A reading of current treatises in human ecology shows the clues the authors have received from the work of the earlier plant and

⁵ Warming, E., *The Ecology of Plants*, 1909.

⁶ Wheeler, W. M., *Ants, their Structure, Development and Behavior*, 1910.

⁷ Clements, F. E., *Plant Succession*, 1916.

⁸ Taylor, J. W., *Dominancy in Nature*, Hull, Eng., 1913.

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animal ecologists. While there are likenesses between plant and human communities, there are noteworthy differences. In contrast to plants, human beings are actively accommodated to their milieu by means of communication and invention. In consequence, the ideas which the human ecologists have received from another field require very great modifications before they can be used as tools of analysis in the study of human communities.

It was in Great Britain, rather than in America, that the cross-fertilization of sociology and plant ecology first took place. The caption for this new movement was the *Regional Survey*. The survey method had been developing since the sixteenth century. Gerhard Kramer of Holland was the founder of modern cartography, and the first maps of the English counties, drawn by Christopher Saxon, were published between the years 1574 and 1578. Statistical surveys became prominent at the end of the eighteenth century. The Geological Survey had its beginning about this time, and the first census in England was taken in 1801. Since these earlier beginnings there have emerged many special types of the regional survey.

The modern regional survey has drawn its notions from the earlier types of surveying, the more recent studies of plant ecology, regionalism as developed by the French Geographers, and the Social Studies of British social philosophers and anthropologists. Human ecology along with regional sociology are synonyms for the regional survey but they are used very infrequently. It is interesting to note that Patrick Geddes gave leadership to the development of plant ecology and, at a later date, to the development of the regional survey in the human field. It seems quite clear, also, that Geddes and his colleagues have influenced the more recent trends in human geographic studies in France.⁹

"The parallelism of the ecological movement with the modern regional survey movement is even more striking, for regional survey might very aptly be described as the study of human ecology, a conception, to be noted, that is far wider than the established science of economics. Just as Tamsley chose for the title of his early lectures on plant ecology 'The Plant and Its Environment' so 'Men and Their Environments' is the substance of human ecology

⁹ Fagg, C. C., "The History of the Regional Survey Movement," *S. E. Naturalist and Antiquary*, England, 1928.

or regional survey. The two developments have been contemporary and so far as Britain is concerned both have taken their main initiative from Professor Geddes. In the case of plant ecology he directed the energies of other botanists into the new field but in the case of human ecology or regional sociology he has himself taken the leading part in the movement."¹⁰

The regional survey in Great Britain has not developed along the lines of pure science. It has made its contribution to the scientific study of human regions but, like the social survey in America, the reform interest, as applied to education, town planning, civic improvement, and good citizenship, has remained predominant. In all these precursory movements were sown the seeds of the more recently developed lively interest in the space, time, and sustenance relations of human beings. In fact, an interest in this phase of human existence reaches still farther back, and it is to be found in a far wider range of subjects than I have been able to mention. Human ecology, even though its present day purposes are more narrowly defined and its methods more carefully scrutinized than those of its forebears, is but a new name for a very ancient form of investigation.

The Emergence and Use of the Main Concepts in the Field of Human Ecology

Human ecology, as it has come to be more strictly defined, is a young discipline. On account of its recent development, the energies of students in this field have been applied, for the most part, in the discovery and definition of usable concepts, upon which so much depends in making scientific advance in any subject.

Galpin,¹¹ starting with the practical aim of making local governing groups more self-conscious and effective, was led to discover methods whereby the natural boundaries of local communities might be drawn. By using the records of village storekeepers and institutional functionaries, he was able to plot, on the local map, the fringe of most distant points from which farmers came regularly to the village. While the radius varied for different insti-

¹⁰ *Ibid.*, p. 79.

¹¹ "The Social Anatomy of an Agricultural Community," Research Bull. 34, University of Wisconsin, 1915.

tutions, Galpin was able to draw a zig-zag line through the outlying points which were tributary to this village center. This line was the actual periphery of the community. Though not aware of it, Galpin had discovered an important method in the location of the boundaries of a natural area or region. He was also unfamiliar with the processes of spacial arrangement.

The potential development of the natural area concept, implied in Galpin's village community study received a new impetus in McKenzie's study of the city neighborhood.¹² The main advance in point of view lies in the fact that McKenzie took account not only of the diverse natural divisions of the city, but also of the spatial distribution of population elements and institutions in the city as a whole. He advanced the notion that the city is a configuration of central business, industrial, and residential areas. In making this analysis, he was indebted to an earlier study of city land values.¹³

Following the lead of Hurd, he observed that the city expands radially from the central business area, and, depending upon topography, this area tends to be the geographic center of the city. It is surrounded by a more or less disintegrated area inhabited by migratory groups with low buying power. Out from these areas range other residential and industrial districts. Population elements are sifted to these areas in terms of their economic status and racial sentiments. These outlying sections maintain business centers at strategic transportation points which are subsidiary to the central business area. He compared the economic level of various areas by means of the tax returns on household furniture on a ward basis. This device has many limitations. Instability was indicated in different areas by dependency and delinquency case plotting, census returns showing population mobility, and by the turnover in registered voters. In general, stability was found to vary with economic status.

As a check on his more general statistical approach, hampered as it was by artificial ward-line compilations, McKenzie and his sociological assistants made an intensive field study of 1,000 households, and a study of institutions—churches, schools, industries, and recreation. It became clear that a close relationship existed between

¹² McKenzie, R. D., *The Neighborhood*, A Study of Columbus, Ohio, 1923.

¹³ Hurd, Richard M., *Principles of City Land Values*, 1903.

population mobility, economic status and institutional disorganization. The spatial location of institutional clientele was mapped to show distribution trends. McKenzie was studying the configuration of areas and the typical segregations of population elements which, on comparison, may be found in all cities.

The approach to the study of the city as an expanding whole received further definition in the conceptual scheme of Burgess.¹⁴ His chart of the city in the form of concentric zones represents the tendencies of any town or city to expand radially: (I) there is the central business district, the sensitive focal point in the total life of the city. (II) encircling the downtown district is the area of transition, a residential district being invaded by business and light manufacture. (III) a third area is inhabited by the workers in industries, who have escaped from II, but who desire to live close to their work. (IV) next beyond comes a residential area containing high class apartment buildings and exclusive districts with single family dwellings. (V) still farther out are dormitory and industrial satellite cities within a thirty to sixty minute ride from the central business district. These concentric zones divide into smaller subsidiary natural areas in which are segregated, not by design, the economic and cultural groups with their own appropriate configuration of institutions and divisions of labor. All this gives to the city its characteristic distributive pattern, which is practically the same for all American cities.

In the expansion of the city from its central area, its movable elements invade the outer zones and succession tends to take place; that is, a complete change in the use of the land or population type. Changes in spatial location are accelerated by migration to the city. Surface indices of the direction and rate of change are fluctuating land values, which reflect directly the city's mobility. These latter phenomena are also measurable, and in turn, are indicative of the rate and direction of social change.

Burgess' conceptual scheme, with reference to the growth of cities, has been tested out by research projects in a number of cities. His hypotheses were obtained in part from the earlier work of McKenzie, from general observation of the city of Chicago, and from the work of the plant ecologists, as in his use of the concepts of in-

¹⁴ Burgess, E. W., "The Growth of the City," *Pub. Amer. Social. Society*, XVIII:85-97 (1924).

vasion and succession. McKenzie defined these processes more fully in later papers.¹⁵ Burgess tested out some of his preliminary hypotheses by means of the census data, the statistical studies of the Bell Telephone and other utility bodies, and by the exploratory surveys of graduate students under his direction.

While Park and Burgess,¹⁶ at a somewhat earlier date, had used the concept *symbiosis*, other observers brought out more fully the implications of this concept in the study of actual human situations. Different species of plants live side by side in a given community by virtue of the fact that they make different demands upon the habitat, and, incidentally, they often facilitate each other's survival. This possession of the habitat by different species is known as *symbiosis*. There are aspects of the human community almost as impersonal as the symbiotic conditions under which plants live and which are designated divisions of labor, based on regional and occupational differences. But because of the active side of human adjustment, through man's inventiveness, divisions of labor are more dynamic and changing than are the symbiotic conditions under which plants and animals live. This symbiotic aspect of metropolitan areas is quite evident in Haig's New York Research.¹⁷ The expanding city is gradually differentiated into natural areas which have marked specialization of function. This is one way in which competition comes to an equilibrium. By means of population, industrial, and commercial statistics, together with field study, Haig was able to trace the spacial redistribution of certain basic units of industry and commerce. It is obvious that certain functions show increased centralization in lower Manhattan, while others are moving farther out. In some instances they are being decentralized to other cities. In and about Wall Street are to be found the great financial institutions and the administrative headquarters of enterprises whose operation takes place elsewhere. In this area remain just those elements which depend upon quick information and require a minimum of space, such as the highly specialized functions in the fields of finance, information, and industrial ad-

¹⁵ "The Ecological Approach to the Study of the Human Community," *Amer. J. Sociol.*, XXX:287-301 (Nov., 1924); "The Scope of Ecology," *Pub. Amer. Sociol. Society*, XX:141-54 (1926).

¹⁶ *Introduction to the Science of Sociology*, 1921.

¹⁷ Haig, R. M., "Towards an Understanding of the Metropolis," *Quart. J. Economics*, XL:403-430 (1925-26).

ministration. These are interdependent, and their close proximity in an area, is a matter of very great advantage to each unit. Furthermore, the regional division of labor of this area makes its characteristic activities different from, but interdependent with, the functions of other areas such as the retail merchandising area about forty-second street. There are still other areas of industry and residence in the metropolitan region which, taken together, form a major regional symbiotic pattern. Each area in turn has its internal pattern of divisions of labor which operate as a basic mechanism in the selection of appropriate population elements.¹⁸

While Haig saw clearly the trend of decentralization in relation to centralization and the resulting differentiation of specialized natural areas in the metropolis, he did not attempt to locate the natural boundaries of these units. Other students have worked out methods whereby these boundaries may be located with much precision by means of the social research base-map of a given city, which is made by plotting railroad property, industrial and commercial frontage, vacant frontage, parks, boulevards, and physiographic barriers. It is found that one or more of these features rim most of the so-called natural areas, but it is necessary to rely on land value maps where no obvious physical barriers exist and the low point interval in land value delineates such areas.¹⁹

New methods of compiling census data on the basis of small geographically-constant areas, known as *census tracts*, are now being used in a number of cities by the United States Bureau of the Census. These census tracts can be combined to conform to the boundaries of any area that may be chosen. Thus the spatial distribution and trends of change in regard to sex, age, race, nationality, marital condition, and occupation, can be shown with ease for the city as a whole or for any of its subsidiary sections. This census tract device has been used with effect in Green's studies of spatial distribution in Cleveland.²⁰

The concept *dominance* is implied in Haig's study of the metropolis. It is an outcome of the process of centralization under

¹⁸ Douglass, H. P., *The Suburban Trend*, 1925.

¹⁹ Smith, T. V., and White, L. D., eds., *Chicago: An Experiment in the Social Sciences*, 1929, Ch. IV.

²⁰ Green, H. W., *Population Characteristics by Census Tracts*, Cleveland, Ohio, 1930; "Cultural Areas in the City of Cleveland," *Amer. J. Sociol.*, XXXVIII:356-67 (Nov., 1932).

modern conditions of rapid communication. Centers of dominance emerge at focal points in transportation and communication whether they are world centers of dominance or local centers of dominance, as for instance, the down-town centers of modern cities. A center of dominance implies a wider constituency of subordinate areas and centers. The differentiation of areas, the distribution of institutional units, and their complex integration take place with reference to the center of dominance somewhat after the manner in which a higher organism has its parts coördinated and controlled by means of the specialized and central cerebral cortex.²¹

A number of studies have involved the fundamental pre-suppositions of this concept. Gras,²² using a wide range of written sources and employing the methods of natural history, described the various stages in the rise of world-wide economic organization, with London as the center of dominance. It became the great central securities market, the center of trade routes and of telegraphic communication, the headquarters of the great trading companies, and the most active center in the mobilization of commodities and men. Through the natural medium of London new regional divisions of labor arose and within them a new spatial distribution of institutions and men. London's position of dominance was indicated both by the volume of its stock-market and the sensitivity of that market to conditions in any portion of the world in comparison with markets in other centers.

The notion of the *gradient* is being used to measure the degree of dominance which a center exercises in successive zones out toward its periphery. By gradient, is meant the rate of change of a variable condition such as home ownership, sex and age groups, poverty, divorce, or delinquency, from the standpoint of its distribution over a given area.²³ The small units of statistical compilation in census tract cities make possible the application of this device with a minimum of research expenditure. The conception of the gradient has been applied by Park²⁴ in measuring the extent of

²¹ Child, C. M., *Physiological Foundations of Behavior*, 1924.

²² Gras, N. S. B., *An Introduction to Economic History*, 1922; McKenzie, R. D., "The Concept of Dominance and World-Organization," *Amer. J. Sociol.*, XXXIII:28-42 (Jul., 1927).

²³ Burgess, E. W., "The Determination of Gradients in the Growth of a City," *Pub. Amer. Sociol. Society*, XXI:178-84 (1927).

²⁴ Park, R. E., "Urbanization as Measured by Newspaper Circulation," *Amer. J. Sociol.*, XXXV:60-79 (Jul., 1929).

urban dominance in its surrounding trade area. He chose as his index the circulation of metropolitan dailies, and he obtained his data from the Audit Bureau of Circulations. Starting in Chicago, his distribution map shows the metropolitan dailies to be dominant for a distance of fifty miles from the city. Their circulation was ninety per hundred in the news-reading center of Chicago and fifty-two per hundred at the fortieth mile. Like the drop in land values, this gradual decline continued until the one hundred and twentieth mile was reached where it was nine per hundred. After the fiftieth mile, other small city newspapers assumed circulation dominance over their smaller trade areas. Within this fifty mile radius lies Chicago's primary trade area, the region within which its suburban areas and satellite cities are closely dependent upon the central city. Within such a region the trade routes, agencies of communication, news, and objects of attention come to focus in the metropolis. Metropolitan patterns of behavior are successively modified with increased distance from the center of dominance.

Recent studies of the trends of centralization and dominance in rural regions have been made by Zimmerman²⁵ and by Whetten²⁶ under Zimmerman's direction. The chief sources of data were: Bradstreet's Book of Commercial Ratings, extant maps over successive years, the census data, and, for the Minnesota study, the records of the League of Minnesota Municipalities, as well as extant studies of standards of living of Minnesota farm families. Zimmerman obtained other data by making a more intensive survey of a smaller group of centers free from recent colonization. This special study he used as a check on his findings for the State as a whole. The firm of Bradstreets has been in operation more than three-quarters of a century. Its books give the name of the trade center, its size and location; relationship to the railroads, highways, telephone, telegraph and express services; the presence of hotels and banks; and the credit ratings of the center's business units.

Zimmerman classified a center as *independent* if it possessed the following services: railway facilities, a newspaper, postal and ex-

²⁵ Zimmerman, C. C., *Farm Trade Centers in Minnesota, 1905-1929*, Bull. 269, University of Minnesota.

²⁶ Whetten, N. L., *The Social and Economic Structure of the Trade Centers in the Canadian Prairie Provinces, 1910-1930*, Ph.D. Thesis, Harvard University, 1932.

press facilities and banking accommodations; as *dependent* if it lacked one or more of these services. These centers were also classified in respect to the number of non-agricultural persons living therein, and also in relation to their number of businesses. Distribution trends were shown by placing these centers, so classified, on maps, at five year intervals.

These studies show that the larger independent centers have grown larger, not at the expense of the small village centers, but at the expense of the less favorably located and less efficient towns with a population ranging from five hundred to twenty-five hundred. It seems clear that the reappearance or disappearance of small trade centers is due to the mobility of the open country population rather than to the growth of the major trading towns. Despite the motor car, these small centers remain as close to the farmer as in the days of the ox-cart. In these days of rapid transportation, he must make many more visits to his nearby center in order to purchase small quantities of up-to-date goods. Thus, these small centers, with more limited functions, still play a vital rôle in the immediate local life of the farm family. No longer does the life of the farm family revolve about a single center. Like the city family, its interests are increasingly multi-centered. The farmer's regional constellation of centers is another indication that city means and manners are marching deep into the rural fringe. By means of a car and a modern highway, he goes quite frequently to the more distant, specialized, luxurious centers, and purchases fine clothes and other goods which identify him more closely with the urban residents. Furthermore, the presence of these larger and more luxurious centers is an index of standards of living in their constituent sections of the rural hinterland.

From the point of view of *natural history*, McKenzie has presented the main factors involved, and has outlined the successive stages in the emergence of metropolitan dominance in a frontier region.²⁷ The pioneer stage was dominated by the lumber industry. Its mill towns and lumber camps, scattered along the shores of the Puget Sound in isolated independence, shipped their heavy products directly to the distant export markets. The development of regional concentration and centralization was brought about by the advent

²⁷ McKenzie, R. D., "Ecological Succession in the Puget Sound Region," *Pub. Amer. Sociol. Society*, XXIII:60-80 (1929).

of the railroad, which made Seattle and Tacoma, on the east side of the Sound, the chief ports. The railroad, in turn, caused the development of the coal industry which accelerated the concentration of population about these same two cities. The railroad was also instrumental in centralizing the scattered units of the lumber industry in the larger towns, while head offices were located chiefly in Seattle. The dominance of Seattle emerged in full force with the coming of the motor car, the hard-surfaced highway, the Panama Canal, Pacific trade and the changing technique of business organization. All these factors caused a fundamental redistribution of population units and social institutions. A greater stability for the whole economic base came with increased complexity. Succession in lumbering, farming, and types of farming, brought new racial and occupational groups to the region. The data were secured mainly from the census, reports of the governmental departments and other organizations interested in lumbering, coal-mining, fishing, and agriculture. A history of Seattle, the daily press, and field study supplied additional information.

Some of the present day studies of regional centralization and decentralization in France are being undertaken for the purpose of discovering the *natural basis of administrative efficiency*. The regional markets have coalesced and have come to focus in the French capital. Likewise, political administration has shown a decided trend toward centralization in Paris. Yet there are counter trends toward regional autonomy in the evolution of economic and social functions in the diversified outlying and subordinate areas. The central theme of these researches is the discovery of just those functions and types of organization which a given area may hope to maintain in the regional division of labor and in relation to the central city. Two analytical and historical studies present this whole problem in clear perspective.²⁸

The Ecological Approach in the Study of Social Structure and Social Types

The ecologist works on the hypothesis that ecological organization determines the type and direction of social interaction. Further-

²⁸ Brocard, Lucien, "Regional Economy and Economic Regionalism," *Annals Amer. Acad. Polit. and Soc. Sci.*, CLXII:81-92 (July, 1932); Gooch, R. K., *Regionalism in France*, 1931.

more, he seeks to find indices of the latter in terms of the former. When this ecological approach is employed in a study of the social structure, human ecology becomes regional sociology.²⁹ Mukerjee, by means of careful observation of the Ganges Valley, found that the village communities of the upper plain exhibit a very different ecological and social pattern from that of the lower delta communities. In the upper area the homesteads expand by mere aggregation. Occupations and castes are few and social distances are relatively fixed. Values of all types of property change very slowly and social life is very stable. In the lower plains precarious natural conditions play an important rôle in the distribution of homes and in man's social activities. Close settlements are to be found in the high places, while marshy areas have scattered habitations and there is more movement and individualization. The inhabitants combine fishing, transport, and trade with agriculture. "Boom" markets rise and ebb with the tide. Crime is symptomatic of rapid social changes and bears a close relation to population mobility and land values.³⁰

Mobility has been made the subject of a special study in its horizontal and vertical aspects by Sorokin,³¹ who, using census and industrial reports, presented, in quantitative form, the types and trends of spatial mobility.

The study of social types has been approached from the point of view of rapid changes in spatial position. The hobo³² is largely, though not exclusively, a product of the extreme mobility of our modern industrial regions. Anderson made this type the subject of a case study which links the hobo with the institutions of his special habitat. In their studies of the related social types, the *gangster* and the *delinquent*, Thrasher³³ and Shaw,³⁴ in plotting their cases on the map, found that gangs and delinquents per capita of boy-population of the same age groups showed a very great preponderance in what Burgess and others have called the area of transition. In this area delinquency and other types of social and

²⁹ Mukerjee, R., *Regional Sociology*, 1926.

³⁰ Mukerjee, R., "The Concepts of Distribution and Succession in Social Ecology," *Social Forces*, XI:1-7 (Oct., 1932).

³¹ Sorokin, P., *Social Mobility*, 1927.

³² *The Hobo: the Sociology of the Homeless Man*, 1923.

³³ Thrasher, F. M., *The Gang*, 1927.

³⁴ Shaw, C. R., *Delinquency Areas*, 1929, and *The Jackroller*, 1930.

economic maladjustment are associated with invasion and junking, a receding population density, excessive mobility, ethnic heterogeneity and a wide gap between land and rental values. Shaw and Thrasher supplemented the ecological approach by case studies which yielded further knowledge of the relation of ecological structure to the functions of social institutions in such areas.

Mrs. Wessel,⁸⁵ in her Woonsocket study, using a schedule taken home by school children to their parents, gives some attention to the incidence of intermarriage in relation to birth place and mobility. When the same foreign birth place is recorded for all six ancestors (two parents and four grandparents) the rate of intermarriage is found to be 1.4%. When all six ancestors were born in the United States, it rises to 40.5%. When two birth places for the family are recorded the rate is 27%; but when there are three or more birth places it rises to nearly 100%.

The economic and social study of the Canadian Prairie region⁸⁶ may be considered, in part, a study of regional sociology. The analysis of the social structure has been made in relation to the spatial distribution pattern of basic phenomena which includes density, population pyramids, racial elements, trade centers, the fixed elements in transportation, and the main social institutions. These elements are being mapped to show their spatial and temporal distribution in the region. Typical sub-areas have been subjected to field studies in which a variety of schedules were employed in gathering family and institutional data. Where it was not feasible to get certain data in connection with the time series, it has been possible to use contemporaneous material from sections in different stages of development in filling in such gaps.

The ecological elements in social situations are being scrutinized by social scientists in Germany. Sombart in his *Hochkapitalismus* suggests the necessity of studying population processes within spatial and time limits. Heberle's study of the population of the United States would be classified as ecological, although the connection between mobility and social consequence is not well established by his data. Walther has been using the spatial distribution of votes cast for the various political parties in Hamburg as

⁸⁵ Wessel, Bessie Bloom, *Ethnic Survey of Woonsocket, Rhode Island*, 1932.

⁸⁶ Mackintosh, W. A., Director, Canadian Pioneer Problems Committee. Material is in the process of publication.

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an index of the distribution of political sentiments among the various social classes. Mannheim's students are beginning to use the ecological approach in studying the differences of family life among various classes in Frankfort on the Main.⁸⁷ There are similar developments in many other countries, but space forbids any special mention of them in this paper.

Main Trends in Method

(1) Much attention has been focussed on the discovery of concepts under which types of ecological phenomena may be classified, and by means of which typical events are linked together in a series which indicates the specific direction of a given process. This paper, as far as it seemed feasible, presents the background of these concepts, the order in which they found their way into actual studies and the rôle they played in those studies. Certain works would have been more illuminating if their authors had possessed a clear-cut knowledge of the major concepts in the ecological field.

(2) Methods of enumerating and compiling data change slowly. The census tract movement, now entrenched in several large cities, makes it possible for the ecologist to study with greater precision the spatial and temporal distribution of basic phenomena. This development is in its initial stages and we may expect a wider range of items to be included in tract compilation and an increasing number and variety of areas in which the census tract device is applied. In some of the American cities, plans are made for assembling in a central bureau the statistical and other data which the chief record keeping institutions and agencies are engaged in collecting. In making these data accessible to a larger group of scientists and administrators, more effective methods in their collection and recording are likely to follow.

(3) Since it has been assumed that social structure and social change are closely associated with the configuration of ecological elements, and that in the latter are to be found more readily the indices of the former, a search for more precise methods in establishing indices may be observed in some of the more recent ecological studies. The social behavior associated with the index is

⁸⁷ Hughes, E. C., who has just returned from Germany, has made possible this report on present ecological aspects of German sociological studies.

also being analyzed as a complementary phase of this problem of indices. Ross has pointed out, with the coöperation of the younger Faris, some of the statistical pitfalls of the ecologist.⁸⁸

This chapter comes to a close with a brief statement about the region as a unit of approach. There are many types of regions, such as the metropolis or one of its natural sub-divisions; Galpin's "Village Community"; larger regions or belts which may or may not have boundaries that coincide with those drawn by the physiographer. Wheat belts, for example, may expand through the invention of new types of wheat which require a shorter growing season, or they may contract under the stress of the market conditions. The boundaries of regions drawn by geographers, anthropologists, and ecologists do not necessarily coincide. They are drawn from a special point of view and have a purely pragmatic sanction. Neither are they static for most of the specialists mentioned, but are subject to the trends of growth and change. When selecting a regional unit in the field of the social sciences, one needs to keep in mind the particular usefulness of the area chosen as a field of observation in which the constituent units hang together in some significant fashion. They are closed situations for the moment because they implement controlled observation.

BIBLIOGRAPHY

- Anderson, N., and Lindeman, E. C., *Urban Sociology*, 1928, Part I.
 Dawson, C. A. and Gettys, W. E., *Introduction to Sociology*, 1929, Chs. I, IV, V, VII.
 Hughes, E. C., *The Growth of an Institution: The Chicago Real Estate Board*, 1931.
 McKenzie, R. D., "Human Ecology," *Ency. Social Sciences*, V:314-315.
 Mukerjee, R., *Regional Sociology*, 1926.
 Park, R. E., "The Concept of Position in Sociology," *Pub. Amer. Sociol. Soc.*, XX:1-14 (1926).
 Rice, S. A., ed., *Methods in Social Science*, 1931, 516-518.
 Ross, F. A., "Ecology and the Statistical Method," *Amer. Jl. Sociol.*, XXXVIII:507-522 (Jan., 1933).
 Sorokin, P., Zimmerman, C. C., and Galpin, C. J., eds., *Systematic Source Book in Rural Sociology*, 1930, Vol. I, Ch. V.
 Young, K., ed., *Social Attitudes*, 1931, Ch. VI.

⁸⁸ "Ecology and the Statistical Method," *Amer. Jl. Sociol.*, XXXVIII:507-22 (Jan., 1933).

CHAPTER V

COMMUNITY STUDY

FOR the background if not the real beginning of modern community studies we must go back to the closing decades of last century when the rising tide of humanitarianism and the scientific spirit united in a vigorous attack upon the social problems of that day. This interest in the improvement of social conditions first arose in large cities where the hard lot of the poorer classes presented problems exceedingly difficult of solution. The establishment of social settlements and the rise of the charity organization society brought into this field competent leaders who sought to build their policies and programs upon a solid basis of facts. Their studies of poverty, housing, sanitation, health, and the demoralizing situation existing in the slums ushered in a new era of investigation made especially significant because of the effort to portray conditions as they were found in specific localities. These localized studies of social problems did not always present facts collected in a systematic manner but they were based upon a first hand knowledge of the situation and stand in striking contrast to the more general and abstract discussions that had hitherto been the vogue. Illustrative of this new approach to an understanding of social conditions are Jacob Riis, *How the Other Half Lives* (1890) and *The Battle of the Slum* (1892); *Hull House Maps and Papers* published by Hull House residents in 1895; R. A. Woods, *The City Wilderness* (1898); Robert Hunter, *Tenement Conditions in Chicago: Report of the Investigating Committee of the City Homes Association* (1901); and Charles Booth, *Life and Labour of the People of London* (1889-1902). This last named work issued in 17 volumes over a period of 13 years was a notable undertaking which attracted wide attention and perhaps more than any other publication of that time revealed the possibilities of intensive as well as comprehensive studies of city life. The wealth of material contained in this monumental work fully demonstrated the availability of data for a study of this kind and the possibility of

carrying such a difficult project to a successful completion. Nevertheless, in spite of the wide reaching influence of this pioneer study it did not form a pattern for the social surveys that became so popular later or for the sociological studies in vogue at the present time. Unlike the social survey it carried with it no constructive program for community action. Little attention was given to social psychological and ecological factors now so prominent in sociological appraisals of community life. It made no attempt to look critically into the past nor did it endeavor to point out possible future trends. It was essentially a pathfinding study that blazed out new trails at a time when the technique of social investigation was still in its infancy.¹

These early experiments in studies of local problems were followed by the development of social surveys which stand out as the dominant type of community studies in this country during the first two decades of the present century. It is significant that the first social surveys were launched by the *Charities and Commons* as a journalistic enterprise and that this movement has gained its chief support from social workers. From the beginning it has sought to utilize scientific method in the interests of social reform. On its investigative side, the social survey has followed the procedures worked out in the field of science but the collection and analysis and interpretation of data are regarded as only a part of its task. Its final goal is community action and for the attainment of this end there is not merely reliance upon the journalistic art of graphic portrayal but also upon the device of organization. It is this two-fold emphasis upon diagnosis of existing conditions and the formulation and promotion of constructive programs that gives the social survey its distinctive place in the field of community studies.

In its early development in this country the social survey was regarded as a comprehensive study of an entire political community such as a town or city. Later there was a tendency to concentrate the study upon one major phase of community life as for example, crime, education, recreation, or child welfare. Even in the more general surveys of community conditions, their claims to comprehensiveness have not always been fully attained. The Pittsburgh

¹ Attention should be called to the recent publication of the *New Survey of London Life and Labour*, Vol. I. *Forty Years of Change*, 1930.

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survey² placed chief emphasis upon industrial conditions and problems as they related to the working classes and gave much less attention to other important phases of city life. The Springfield survey,³ which was more comprehensive, included nine main divisions: public schools; mental defectives, insane, and alcoholics; recreation; housing; public health and sanitation; public and private charities; industrial conditions; delinquency and the correctional system; and city and county administration. In spite of the wide range covered by this study it is readily apparent that not all phases of the community were included. Moreover, it must be kept in mind that the study of such topics as industry, education, and the local government is not from the point of view of specialists interested in technical details, but is confined to phases of those topics that bear more directly upon social welfare. The social survey has seldom, if ever, attained the ideal of a comprehensive community study in any accurate use of this term. It has primarily been a study of social problems as they appear in the various fields of community life.

From the point of view of methodology, a distinctive feature of the social survey is its emphasis on local participation. It is essentially a coöperative project initiated or at least formally approved by community leaders. Through the device of organization, local machinery is built up to handle its major activities. With its widely representative general survey committee together with its many sub-committees on fact-finding, publicity, finance, etc., the social survey mobilizes the local leadership and brings it into effective action. This wide use of local assistance is of fundamental importance since it enlists public interest, breaks down opposition to the study, and builds up an influential group eager to put into effect the survey's recommendations. In the work of investigation the usual means of collecting data are utilized: study of records, personal interviews, filling out of schedules by field workers, the circulation of questionnaires, house-to-house visitation, observation of the work of agencies and institutions, etc. The investigative phase of the social survey has no peculiar method of its own but endeavors to collect, classify, compare, and evaluate its data in

² Kellogg, Paul U., ed., *The Pittsburgh Survey*, 6 vols., 1914.

³ Harrison, S. M., *Social Conditions in an American City: A Summary of the Findings of the Springfield Survey*, 1920.

accord with the best scientific procedure. The survey's chief contributions to community studies are its emphasis on coöperative machinery and its wide use of publicity devices designed to acquaint the public with its findings and bring about the desired improvements in the local situation.

This use of the social survey to bring about desired changes in the community has caused many to question the validity of its findings. There can be no doubt that this practical goal tends to influence the selection of data and makes difficult unbiased recommendations. Nevertheless, in the main fields of inquiry in which the social survey has ordinarily operated, the general situation is so well understood and the methods used so well standardized that it is doubtful whether there has been much serious distortion of facts because of wishful thinking. Certainly some of the more important surveys have been characterized by the careful use of objective methods. On the other hand the tendency to use the survey for propaganda purposes constitutes one of its chief weaknesses considered from the point of view of social research.

Closely allied with the social survey is the community case history which endeavors to describe the community in action over a period of years instead of presenting a cross section of the community at any particular time. Early patterns for this latter type of study were Richard Morse, *Fear God in Your Own Village* (1918), a description of the experience of a minister who served as secretary of a neighborhood association along with his pastoral duties, and Evelyn Dewey, *New Schools for Old* (1919), which gives a vivid account of an experiment in building up a rural school district. The usefulness of such publications in the field of community organization was readily apparent and led to the preparation of more detailed studies of the steps taken in the promotion of community enterprises in order to throw light on successful and unsuccessful procedure. W. W. Pettit, *Case Studies in Community Organization* (1928), was one of the first important publications in this field designed to aid the social worker in dealing with problems connected with the building up of social welfare agencies. Studies of this kind are usually based on diaries or records kept specially for this purpose or are autobiographical accounts of the experiences of social workers dealing with particular situations. Such studies are of course highly subjective and are ordinarily little more than

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a description and interpretation of a series of events from the point of view of an interested participant. Nevertheless an effort is made to achieve objectivity and they undoubtedly present data of great use to community organizers.

Community studies of the types that have just been discussed with their emphasis upon social problems and community improvement represent one of the major approaches to an understanding of community life. In general they have been developed and sponsored by social workers and civic leaders and have been a part of the broad program of social amelioration. To a considerable degree paralleling this interest in social surveys beginnings were made in the development of sociological studies of communities during the first decade of the present century, but with few exceptions these neither attracted much attention nor seemed to offer promise of fruitful results. For the most part, the sociologists who had interest in this field of study followed the patterns set by the social survey and it was only gradually that new types of studies were worked out from the sociological point of view. While it is difficult to indicate precisely when and how this new approach to the study of the community appeared, two papers were published in 1915 which exerted a wide-reaching influence and set into motion new lines of investigation. The first of these papers was C. J. Galpin, *The Social Anatomy of an Agricultural Community*,⁴ which stimulated interest in the study of the community as a geographical as well as a social unit by pointing out how the boundaries of a rural community may be determined through the device of locating on a map the residences of the more distant patrons of its social and economic institutions. The second paper by R. E. Park, entitled "The City: Suggestions for the Investigation of Human Behavior in the City Environment,"⁵ called attention to the structural differentiation of the urban community, the factors that determine its manner of growth, its economic organization and division of labor, the mobility of the people, means of communication, and the necessity of studying these fundamental aspects of the community in order to understand its major problems. Methods of inquiry were suggested which brought about investigations concerned with the nature of the community and its social

⁴ Research Bull. 34, University of Wisconsin, 1915.

⁵ Park, R. E., and Burgess, E. W., *The City*, Ch. I.

processes rather than with the diagnosis of social problems. A characteristic of this new approach was its emphasis upon that which is typical in community life. The sociologist is concerned with the specific findings of a given situation as one step toward determining to what extent they may be true of communities in general. Community studies, therefore, are exploratory and are designed to furnish data that will throw light on the processes of social interaction. It is this distinctive trait that marks the real dividing line between the social survey and the sociological community study. Their methods of investigation are much alike and a great deal of their source materials are of value to both, but their emphases and points of view are essentially dissimilar. They represent two entirely different although supplementary approaches to the study of the modern community.

The sociological studies of the community are too recent to be well standardized as is the social survey. Their methodology is still in the experimental stage and is so varied that it cannot be readily set forth apart from description of individual studies. Some bear many of the earmarks of the social survey while others attempt to carve out new lines of procedure more in accord with their purpose. Perhaps one of the most important of the newer developments in community studies is the ecological approach with its emphasis on the pattern of distribution of both people and institutions within the community as determined by topography, division of labor, means of communication and transportation, land values, and other social and economic factors. Studies of this kind have been made of both rural and urban communities but their most noteworthy development has been in connection with recent studies of Chicago, well known examples of which are Nels Anderson, *The Hobo*, F. M. Thrasher, *The Gang*, and H. W. Zorbaugh, *The Gold Coast and the Slum*. The characteristic feature of these investigations is the attempt to set forth their pertinent data in relation to the ecological groundwork or configuration of the city or of the natural areas within the city. Within this framework of ecological organization the various problems and conditions of city life stand out in bold relief and can be studied in relation to the community forces that have conditioned their development. Especially important from the ecological point of view is the division of the larger community, such as the town or city, into natural areas or communities,

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the location and description and analysis of which are the first tasks of the ecologist in his approach to community studies. This method of science which studies objects not as a complete whole but by an analysis of their parts with emphasis upon their interrelationships is setting the pattern for the recent scientific study of communities. The present trend is toward studies of a specialized nature in which interest is centered upon a particular problem or phase of community life. Not merely in ecological studies but in those that are primarily concerned with social psychological factors, culture patterns, personality types, social organization, and social control, this segmental attack upon the community is strongly the vogue.

Among the significant contributions of this ecological approach to the community is the wide use of maps of different kinds not merely to portray the findings in a graphic manner, but to verify hypotheses and give a better understanding of the community itself. Especially notable has been the development of the social research base map, which sets forth the basic uses of land and thus furnishes an illuminating background for the different kinds of data superimposed upon it. While the sociological studies mentioned above have relied largely upon case materials, the statistical method has also been widely used in this field. An example is E. W. Burgess, "Determination of Gradients in the Growth of a City,"⁶ in which he describes his efforts to measure the process of radial expansion in city growth by the use of gradients or rates of change of such conditions as poverty, home-ownership, or divorce from the standpoint of their distribution over a given area. In C. R. Shaw, *Delinquency Areas*, this method was employed to show the concentration of juvenile delinquency in certain urban districts and the gradual decline of delinquency rates from the center to the periphery of the city.

For source materials the ecological studies have drawn upon many fields. Geography and economics furnish data of fundamental importance. Indispensable is the census material covering the composition of population as well as facts concerning home-ownership, occupations, manufacturing, religious bodies, and other fields of activity. In the study of large cities the use of census materials by census tracts or enumeration districts has been espe-

⁶ *Pub. Amer. Sociol. Society*, XXI:178-84 (1927).

cially important in determining the characteristics of the different ecological areas and has given great impetus to recent efforts to have the census data made available in this detailed manner. The elaborate analyses of this material by census tracts in Chicago and Cleveland, which have been recently published, indicate clearly the value of data of this kind in understanding the growth and characteristics of great cities.⁷ Among other important materials drawn upon are reports and bulletins of governmental departments, reports of private organizations and unofficial investigations, the files of newspapers and magazines, diaries, autobiographies, life histories, and unpublished documents collected from various sources, and materials secured through personal interviews and special field studies. Modern sociological studies have been enriched by their use of a much wider selection of source materials than was customary in earlier studies of community life.

Another important experiment in modern community analysis, which is of special interest in a discussion of methodology, is the comprehensive study of *Middletown* published in 1929.⁸ According to the foreword of the published report, the pattern for this investigation was taken from the field of cultural anthropology and it is described as an attempt to discuss as frankly and dispassionately the customs and manner of living in an American city as anthropologists discuss the mode of life in a savage tribe. Its investigators were visitors from the outside who during a period of more than a year actively participated in the life of the city while engaged in collecting their data. Their field of investigation included all the major activities of the people, and while not all topics of interest were developed, their effort to make it a "total-situation study of a contemporary civilization" was fairly adequately realized. In this study interest was focussed not on specific social and economic problems but upon facts concerning situations and interrelationships that would throw light on the process of social change. It was planned as a dynamic study of a changing situation rather than as a description of conditions as they existed at any one time. As a means of accomplishing this purpose, the device was used of

⁷ Burgess, E. W., and Newcomb, C. W., *Census Data of the University of Chicago*, 2 vols., 1932; Green, H. W., *Population Characteristics by Census Tracts*, Cleveland, Ohio, 1930.

⁸ Lynd, R. S., and Lynd, H. M., *Middletown*, 1929.

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presenting the situation in 1890 as a bench mark or base line against which conditions at the time of the study could be projected. The investigative phase of the study developed no new procedures and the source materials were those common to community studies. Its claim to distinction rests largely upon its vivid and detailed descriptions of the moving panorama of human life and its skillful analysis of changing human behavior as it appears in the multiform activities of an urban community. Since the investigation delved deeply into the field of human relations and set forth aspects of the community that were not always complimentary, the report was published anonymously, thus departing from the traditions that had been established both by social surveys and by previous social research studies of communities.

One of the most recent developments in community studies is the enlargement of their scope to include the region. Under modern conditions the local community has become more intimately bound up with its adjacent territory and therefore cannot be satisfactorily studied as an isolated unit. The increasing interdependence of adjacent communities has important implications for city planning and has led to regional surveys of large cities and their surrounding territory as a first step toward the more effective planning of metropolitan areas. A recent example of such studies is the regional planning surveys of the Committee on Regional Plan of New York and Its Environs.⁹ In this extensive regional study for which one million dollars were expended over a period of seven years, experts from many fields coöperated in assembling and analyzing a mass of information covering such topics as business and industry, population, land values, government, highway traffic, transportation, recreation, neighborhood planning, and public services. Another approach to the study of the region is the ecological which has been exploited largely by geographers, economic historians, and students of population problems. The sociologists interested in ecology have not given much attention to the region as a unit of

⁹ *Regional Survey of New York and Its Environs*: Vol. I., Haig, R. M., *Major Economic Factors in Metropolitan Growth and Arrangement*; Vol. II, Adams, Thomas, *Population, Land Values, and Government*; Vol. III, Lewis, H. M., *Highway Traffic*; Vol. IV, Lewis, H. M., *Transit and Transportation*; Vol. V, Hanmer, Lee F., *Public Recreation*; Vol. VI, Adams, Thomas, *Buildings: Their Uses and Spaces About Them*; Vol. VII, Perry, C. A., *Neighborhood and Community Planning*; Vol. VIII, Lewis, H. M., *Physical Conditions and Public Services*.

investigation but a beginning has been made in such studies as R. D. McKenzie, *Ecological Succession in the Puget Sound Region*,¹⁰ and R. E. Park, *Urbanization as Measured by Newspaper Circulation*.¹¹ In these studies an attempt is made to define and describe the region through the study of such factors as the growth of population, successive spatial patterns in the distribution of the people, changes in the economic base, newspaper circulation, the integration of the various territorial units, and the growing dominance of metropolitan centers. Unlike the regional surveys of metropolitan areas, these ecological studies are not concerned with emergent problems of regional planning but are carried out as projects in the field of social research. The growing interest in the region as a unit for investigation is stimulating the undertaking of these wider territorial studies which supplement in a very effective way the studies of local communities.

BIBLIOGRAPHY

- Bogardus, E. S., *The New Social Research*, 1926.
 Burgess, E. W., ed., *The Urban Community*, 1926.
 Elmer, M. C., *Technique of Social Surveys*, 1927.
 Galpin, C. J., *The Social Anatomy of a Rural Community*. Research Bull. 34, University of Wisconsin Agri. Exp. Station, 1915.
 Morse, A. N., *Social Survey in Town and Country Areas*, 1924.
 Palmer, Vivien M., *Field Studies in Sociology*, 1927.
 Park, R. E., "The City: Suggestions for the Investigation of Human Behavior in the Urban Environment," *Amer. Jl. Sociol.*, XX:577-612 (1915).
 Pettit, W. W., *Case Studies in Community Organization*, 1928.
 Steiner, J. F., *The American Community in Action*, 1928.
 Wood, A. E., "The Place of the Community in Sociological Studies," *Pub. Amer. Sociol. Society*, XXII:14-25 (1928).

¹⁰ *Pub. Amer. Sociol. Society*, XXIII:60-80 (1929).

¹¹ *Amer. Jl. Sociol.*, XXXV:60-79 (1929).



CHAPTER VI

RURAL SOCIOLOGY

I. *Introduction*¹

ALTHOUGH the first course in rural sociology was offered in the United States before the beginning of this century, definite research in the subject did not begin until much later. Historical studies, such as the New England village community studies of Adams, had been made before 1900 and the important historical monographs of Williams and Wilson appeared in 1906 and 1907, respectively; yet it may be fairly stated that the field study of contemporary rural life began about 1910. General social surveys attempting to picture the whole life of an area, and special social surveys of such rural institutions as church and school, together with related social conditions, became the dominant type of research and remained so for approximately a decade. Probably the outstanding methodological contribution before 1920 was Galpin's method of determining and mapping the farm-village community.² Other important contributions should be noted, however. Gill and Pinchot correlated church conditions with other significant social conditions. Vogt developed certain criteria of village growth, Galpin had formulated his theory of hoe-farmer and machine-farmer psychology and Bernard had published a theory of rural attitudes. After the establishment of the Division of Farm Population and Rural Life in the Bureau of Agricultural Economics at Washington, D. C., in 1919, and particularly after the Purnell Act of 1925 became a law, the volume of research greatly increased and the methodology employed was greatly elaborated.

¹ No brief analysis can do justice to the sources of data and methods of investigation employed in rural sociology. For purposes of this chapter, therefore, the field is limited to rural sociology in the United States, and the student is advised to make extended reference to "Rural Sociological Research in the United States," a monograph issued in 1928, and the later monographs on Scope and Method in rural sociology now being issued at intervals by the Social Science Research Council.

² Galpin, C. J., *The Social Anatomy of an Agricultural Community*, Wis. Agri. Exp. Station, Research Bull. 34, 1915.

The various colleges of agriculture have played a particularly important part in the development of rural sociological research. In these institutions rural sociology has commonly been either administered by or closely associated with agricultural economics. Furthermore, the point of view with respect to rural problems prevailing in these institutions has generally been an economic one. This has necessitated something of an economic approach to the study of these problems, even on the part of the sociologist. For these reasons, rural sociology has probably borrowed more of its methodology from economics than from any other single source. Historical methods have not been extensively used owing to the dearth of satisfactory records dealing with the problems under consideration. Most of the research in rural sociology has and does involve field work. At present the restudy of areas formerly studied is making possible the determination of social trends through the establishment of two points in the time series.³

II. *Sources and Methods of Collecting Data*

1. *Research Based Upon Official Statistics.* The use of official statistics in rural sociology is limited to the data collected by the various federal and state censuses, the vital statistics of the Federal Census and of the state bureaus, and the records of national and state departments. Certain county records are also available and may be found useful and sufficiently accurate for certain purposes. Aside from the purely agricultural data and the enumeration of the total rural population the Federal Census was of little use until 1920. With the separate enumeration of the farm population (and also of the rural non-farm population in 1930), together with some analysis of its composition and characteristics, the statistical basis of good rural sociological research has greatly improved. Special analyses in the form of Census Monographs and special tabulations for limited areas, upon request by the research worker and payment to cover costs, constitute important extensions to the conventional use of census materials.

The rural sociologist often finds difficulty in using the official vital statistics because of the manner of recording the data and

³ Brunner, E. deS., and Kolb, J. H., "Rural Life," *Recent Social Trends in the United States*, 1933, Ch. X.

defining the categories used. A good example of valuable research based upon such data may be found in the coöperative study of P. G. Beck and H. F. Dorn. These men reallocated by residence the births and deaths in Ohio for the year 1930, computed true and standardized rates and analyzed the results by cause of death and for factors associated with variations in the birth rate. Only certain preliminary results have been published to date.

2. *Research Based upon Statistics and Records Collected by Organizations and Agencies Usually for Purposes Other than Research.* This classification contains a great number and variety of sources of data. Some of the most important of these are (1) compilations, such as the various sorts of Who's Who, Bradstreet's Commercial Ratings, and directory of the American Medical Association; (2) newspapers and farm journals; (3) organization records, such as those of church denominations and farmers' organizations; (4) special records occasionally kept by an institution or organization; and (5) local histories, diaries of individuals, etc.

The use of Bradstreet's Commercial Ratings may be illustrated by the Minnesota studies of farm trade centers, 1905-1930, by Zimmerman⁴ and Lively.⁵ In these studies, the data on trade centers were taken at intervals of five years. By means of statistical analysis and ecological methods, important economic and social trends were distinguished both for the state as a whole and for various subareas. Furthermore, by noting the rise and decline of certain types of data in the Ratings, certain inferences with respect to qualitative changes occurring in the social organization of the state were made. These data were also correlated with significant social data drawn from other sources.

The local rural newspaper formed one of the chief sources of data employed by Williams⁶ in his study of a rural community in New York. He states that "the most important documentary source for the study of rural social psychology is the rural newspaper." Since Williams' method has been carefully analyzed by Rice,⁷ further space will not be devoted to it at this point.

⁴ Zimmerman, C. C., *Farm Trade Centers in Minnesota, 1905-1929*, Minn. Agri. Exp. Station, Bull. 269, 1930.

⁵ Lively, C. E., *Growth and Decline of Farm Trade Centers in Minnesota, 1905-1930*, Minn. Agri. Exp. Station, Bull. 287, 1932.

⁶ Williams, J. M., *An American Town: A Sociological Study*, 1906.

⁷ Rice, S. A., ed., *Methods in Social Science*, 1931, 458-467.

The records of institutions and organizations have played an important part in numerous studies in rural sociology, particularly those of a historical nature. The use of local church records by Wilson,⁸ and of farm organization records by Tetreau,⁹ afford good illustrations of types of historical and contemporary studies which have drawn heavily upon such records.

Purely local records of organizations and institutions, while highly desirable for research purposes, are extremely variable and often so fragmentary as to be of no value, if indeed they have been preserved. Occasionally, however, such a source may be discovered that offers data of peculiar value extending over a considerable period of time. Such a source provided the data for Hoag's¹⁰ valuable study of migration in a New York rural community. It was found that the records of the academy at Belleville extended over a period of nearly 100 years, and that practically all of the farm families residing near the academy during the period had enrolled one or more children therein. These records constituted a core of data which when properly supplemented enabled the investigator to trace the subsequent wanderings and accomplishments of 2,445 persons.

3. *Special Records and Documents Kept or Produced at Request, with or without Supervision.* This group represents a source of materials for research in rural sociology, the value of which is not yet fully appreciated. Some of the most common types of data classified under this head are results of questionnaires, conferences with old settlers and other participant observers, letters written upon request upon assigned topics, periodic reports by specially selected lay field observers, autobiographic life histories, family case histories written by members, and actual documentary records such as use of time and money expenditure records.

The questionnaire has been little used by rural sociologists. Conferences with old settlers plays an important part in local social trend and historical studies,¹¹ and conferences with other partici-

⁸ Wilson, W. H., *Quaker Hill: a Sociological Study*, (doctor's thesis, Columbia University), 1907.

⁹ Tetreau, E. D., *The Objectives and Activities of the California Farm Bureau*, Bull. of the Giannini Foundation, Berkeley, California.

¹⁰ Hoag, Emily, *The National Influence of a Single Farm Community*, U.S.D.A., Bull. 984, 1921.

¹¹ Williams, J. M., *Our Rural Heritage*, 1925.

pant observers is always a valuable supplementary technique. Some use has been made of letters written by farm people upon request. This is at best a questionable scientific technique, and when employed without due regard to the selectivity of the sample, has sometimes led to fallacious conclusions.

A variation of the federal crop reporting system is employed by the Division of Farm Population and Rural Life of the U. S. Bureau of Agricultural Economics to obtain yearly estimates of the movement of population to and from farms. These estimates together with birth and death records render yearly estimates of the total number of persons living on farms possible. These estimates have been made since 1922, and when checked with the 1930 Census showed sufficient accuracy to make them quite serviceable on a national basis. The system is now being improved so as to make the estimates usable on a state basis.

Autobiographies have as yet contributed little to rural sociology. Family case documents prepared by participant observers, usually children, are being collected by several investigators, but the writer is unaware of any published results.

Special records kept by country people for a given period, with or without supervision, have been employed with success by a few investigators. It is the writer's opinion that this method of obtaining data will play a more important part in future research. Home economists have devised a clock-system record by which they have obtained the schedule of farm homemakers' activities. Through the assistance of the agricultural extension service, the writer¹² was able to obtain the coöperation of farm families in Ohio in the keeping of supervised household records of family living. Over a three-year period, 117 families produced 187 complete one-year records. Even more detailed coöperation and supervision were obtained for a similar investigation by home economists at Iowa State College. By similar means, Burt¹³ was able to obtain detailed records of the social contacts of all persons in local areas, for a short period of time.

4. *Research Based upon Field Work.* Some sort of field work has been, is, and probably will remain the chief source of data for

¹² Lively, C. E., *Family Living Expenditures on Ohio Farms*, Ohio Agri. Exp. Station, Bull. 468, 1930.

¹³ Burt, Henry J., *Contacts in a Rural Community*, Mo. Agri. Exp. Station, Research Bull. 125, 1929.

research in rural sociology. Furthermore, rural sociological research usually employs some form of sampling procedure rather than that of complete enumeration. The general social surveys of an earlier period sampled what appeared to be representative areas and attempted to depict the total life of the area. But more recent researches do not attempt to encompass the whole of rural life within a given sample area. Rather, the procedure has tended to be that of sampling several areas, or groups, each exemplifying different degrees of the specific variable under investigation.¹⁴ At times when there was no *a priori* knowledge of the extent of variation of the factor investigated, sampling has been based upon characteristics that were assumed to be related to variation in the factors investigated.¹⁵ Proportional sampling has rarely been employed, because of the absence of knowledge of the size of respective sub-groups composing the universe investigated. It may be well to suggest at this point that rural sociologists have probably over-emphasized the value of sampling at or near the mean. Stimulating cues to further research come more often, perhaps, from a study of the extremes of a distribution than from a study of the mean. Certainly the extremes should never be ignored.

As a rule the rural sociologist doing field research has employed some sort of a schedule and interview technique in collecting his data. This technique possesses very definite limitations, and rural sociologists are now beginning to feel the need of methodology that will enable them to determine more fully the meaning and complete social setting of the factors which they are studying by means of schedule and statistical analysis. For this reason the case method, which has been applied to rural social data in only a limited way, will probably receive more emphasis in the near future. Such studies as Kolb's case studies of rural organizations, the studies of what farmers think of farm organizations by Manny,¹⁶ of the "activity-wishes" of young people by Burt, and of successful rural churches by Brunner,¹⁷ represent worthy attempts to get beyond the simple counting processes of the ordinary field schedule.

¹⁴ Kirkpatrick, E. L., *The Farmer's Standard of Living*, U.S.D.A., Dept. Bull. 1466, 1926.

¹⁵ Lively, C. E., and Beck, P. G., *Movement of Open Country Population in Ohio*, Ohio Agri. Exp. Station, Bull. 467, 1930.

¹⁶ Manny, T. B., *What Ohio Farmers Think of Farmer-Owned Business Organizations in that State*, U.S.D.A., Circular No. 240, 1932.

¹⁷ Brunner, E. deS., *Churches of Distinction in Town and Country*, 1922.

III. *Methods of Analysis and Generalization*

I. *Pioneer Methodology.* Most of the early generalizations about farm people and rural society were based upon the general background of experience of the student, casual observation, and scattered records and conferences, *i.e.*, a sort of informal statistical technique plus convictions arising out of weighted experience. When to these were added the insight of a keen intellect and some knowledge of historical facts, sound generalizations of the more obvious sort were often produced. These students of rural life often promulgated theories which have served, or may serve, as stimuli to further research. Ross' theory of the selectivity of rural depopulation, Galpin's theory of hoe-farmer and machine-farmer differences, and Gillette's theory of community differences arising from variation in type of agriculture are illustrations. Many more such theories could be cited. Warren H. Wilson assumed a correlation of social and economic data and constructed a theory of rural community development based upon economic stages. Several writers asserted that the evils of tenancy arose from excessive mobility and others assumed that since a high proportion of the urban great originated on farms, the farm population contributed persons of distinction at a very high rate. Much of the task of scientific rural sociology has been to test and restate these earlier assumptions.

As the rural social survey was brought into use the basis of conclusion was shifted to the specific conditions found in small local areas. Since these surveys were necessarily scattered, and generally portrayed incomparable conditions, they served mainly to emphasize the variability of rural life and to raise speculation as to the extent of the conditions which they portrayed. Many of these cross-sectional surveys were admirably done, but they contributed less to an understanding of rural life and society, perhaps, than such historical studies as those of Williams¹⁸ and Wilson.¹⁹

2. *The Ecological Method.* The method of studying rural social groups and institutions in their spatial relationships was first definitely employed by Galpin²⁰ in 1914, although it had been used to some extent prior to that time. Later investigators, chiefly in the

¹⁸ *An American Town.*¹⁹ *Quaker Hill.*²⁰ See f. n. 2.

fields of rural social organization and population, have greatly extended the use of this method. Kolb²¹ mapped the neighborhood groups of Dane County, Wisconsin, and showed their relationship to physiographic features, trade basins and other significant social factors. He was thereby able to distinguish roughly the relative importance of various factors in the formation of neighborhoods. By superposing contemporary neighborhoods upon historic groupings, he was able to study neighborhood change. Later he was able to return to these records, and with more recent data show the occurrence of a trend from locality to special interest groupings. Similar methods have been employed by a number of rural sociologists in the study of rural social relationships. More recently, however, the trend has been away from the study of composite groups, such as Kolb's neighborhoods, toward a detailed study of their component parts. After a detailed application of this method to Schuyler County, New York, Wakeley²² concluded that there were no relatively self-sufficient communities, and that the entire county "may be included in geographical communities of one of four kinds, on the basis of the approximate incidence of their characteristic interest or service areas," and that the psychological factor was significant only in a few cases of exceptional solidarity.

Rogers²³ extended the ecological method to the study of family social relationships in an effort to determine primary groupings, and Melvin and others have used similar methods in the study of population data. Lively, Willson, Garnett and others have employed a variation of the ecological method for studying the rural social agencies of a state on a county basis. The problems of rural life readily lend themselves to study by the ecological approach, particularly when the method is combined with others, such as the statistical or case method, and one may hope for further extension of the method in the rural field. For example, one may imagine some illuminating results accruing from a thorough study of rural delinquency and dependency by ecological methods.

²¹ Kolb, J. H., *Rural Primary Groups*, Wis. Agri. Exp. Station, Research Bull. 51, 1921.

²² Wakeley, R. E., *The Communities of Schuyler County, New York, 1927*, Cornell Agr. Exp. Station, Bull. 524, 1931.

²³ Rogers, D. B., *Rural Social Organization in Liberty District of Ohio County, West Virginia*, Unpublished M. A. Thesis, Ohio State University, 1926.

3. *The Statistical Method.* In recent years the statistical method has become the chief methodological tool of rural sociological research. Influenced by the apparent objectivity and finality of this method, rural sociologists have employed statistics with increasing frequency and facility, perhaps often overlooking other methods of equal effectiveness. The writer is in no sense inclined to discredit the statistical method. It seems clear, however, that rural sociologists are beginning to concern themselves with the limitations of the method as well as with its application.

The bulk of the statistical work in rural sociological research has been limited to such simple mathematical analyses as frequency distributions, measurement of central tendency, and the simple sorting of two variables. While statistical methods have been used throughout all types of projects, they have been most extensively employed in the study of population and standard of living problems. In these fields it has become increasingly evident that the study of a single variable tells little, and that it is rarely possible to locate a problem so simple as to involve but two variables. The introduction of the correlation technique has been of great value in so far as it has proceeded beyond the mere computation of correlation coefficients, and has resulted in a study of the relationships of two or more variables by means of scattergrams and the segregation of rectilinear from curvilinear relationships. In general, such pioneer studies of farm family living as those of Kirkpatrick²⁴ served principally to open up the problem in all its complexity and suggest the necessity of more refined techniques for untangling the relationships of the many variables involved. This situation brought forth several studies in which the methods of multiple and partial correlation were employed with varying degrees of success.²⁵ It appears quite clear from an inspection of these studies that some of them have employed too many variables with too few cases, have too easily included variables which were themselves ratios and have not always been careful to drop intercorrelated variables from the problem. Nevertheless, an important conclusion is suggested by these studies, namely, that beyond the mere fact of ability to pay, which in itself is no guarantee of a correlative plane of living, the

²⁴ See f. n. 14.

²⁵ Zimmerman, C. C., "Mathematical Correlation in the Household Budget," *Sociologist*, June, 1932.

plane of farm family living is determined by a great complex of minor variables which apparently are not obvious and easily reduced to a mathematical basis.

In the field of population movement, the attempt to determine the nature and extent of movement and the factors related thereto has revealed a series of variables, some of which lend themselves to correlation analysis,²⁶ but the problem of population selectivity in rural-urban migration has been attacked by the simpler statistical devices. By simply sorting the population of a county into the three prevailing social classes and determining the migration from each, Gee and Runk concluded that rural-urban migrations do not follow chance selection as contended by Zimmerman. On the other hand, after finding that the individuals who farm were predominantly common school graduates and the sons of farmers with more than an average successful business, Lively and Beck concluded that those who farm are those who by schooling and apprenticeship are most likely to succeed. Clearly the difficulty of the problem centers about the determination of valid measures of population quality.

A good illustration of the application of the correlation technique to institutional data is found in Fry's²⁷ study of the rural church. With data from representative areas, he was able to demonstrate that the functioning of the church is influenced by such environmental factors as economic status of the locality, density and racial composition of the population and growth or decline of the population of the area. Internally, the size of church membership and the degree of leadership were most significant factors.

Another aspect of the statistical technique is the attempt to develop scales or rating schemes for the simplification and evaluation of rural social data. These attempts have assumed various forms. Through multiple sorting of sample cases, Kirkpatrick²⁸ devised a set of scales to standardize family variations in consumption arising from differences in age and sex composition. The superiority of these scales over other similar devices is still an open question.

A series of scales for the measurement of rural community trends

²⁶ See f. n. 15.

²⁷ Fry, C. L., *Diagnosing the Rural Church*, 1924.

²⁸ See f. n. 14.

has been devised by Burt.²⁹ While the scales were based upon relatively objective data, each was cast in the form of a score card which introduces the valuational factor. Such scales have been found useful as stimuli to organizational effort, but they lack the impartial objectivity so much sought after in social science. An approach that involves the segregation of significant independent variables by the correlation technique, and the construction of a time series for each of these variables is a more valid technique since it eliminates the valuational element. It is, of course, laborious, and what is more serious the basic data for such time series seldom exist for local rural institutions, and practically never for rural communities.

Of greater significance are the various indices of social participation that have been devised. The rural sociologist has strongly felt a need for some objective measure of the developmental variable called "socialization." Hypes and Hawthorn both contributed the one-hour attendance or "exposure" unit as a measure of the social participation of the individual. Division of the total participation hours of the members of a family by the number of persons in the family eligible to participate in a given activity gave a family index of participation. Such an index can be regarded as only a very crude measure of social participation, however. Factors other than attendance at meetings are certainly involved in social participation and variation in intensity of participation among those in attendance at the same meeting is ignored. Kirkpatrick³⁰ constructed an empirical index based upon membership, attendance, contributions, officerships, and committee assignments. Such an index, while it could apply only to formal organizations, might be an improvement over the simple attendance index. However, he apparently weighted the factors arbitrarily and did not examine the intercorrelations of the factors employed in the index. Fry's work with the rural church showed that, from an institutional standpoint, attendance and membership were highly correlated, but money contributions were only slightly correlated with these factors. These relationships should be examined from the family standpoint. Cer-

²⁹ Burt, H. J., *Rural Community Trends*, Mo. Agri. Exp. Station, Research Bull. 161, 1931.

³⁰ Kirkpatrick, E. L., and Others, *Rural Organizations and the Farm Family*, Wisconsin Agri. Exp. Station, Research Bull. 96, 1929.

tainly some valid measure of social participation must be devised by rural sociologists. But the problem must be approached, first, by distinguishing all of the significant variables entering into the concept of social participation, and second, by determining the inter-correlations of these variables, before they can be successfully integrated into a reliable index of social participation.

4. *The Case Method.* As previously stated, the case method has not been extensively employed in rural sociological research, unless one regards the survey of a selected area as a variation of the case method. A few illustrations, such as Claghorn's⁸¹ study of rural juvenile delinquency, are available but no investigator has piled up such a summation of careful case studies that the sheer weight of evidence becomes convincing after the manner of Darwin and LePlay.

5. *The Psychological Method.* The broad, qualitative analysis of rural social movements and mass behavior has been little attempted by rural sociologists. A few studies of the history of farmers' movements fall in this field, and valuable interpretations may be obtained from some rural fiction; but most of this work has been accomplished by persons outside of the sociological fraternity. Most of the textbooks of rural sociology contain chapters dealing with the psychological characteristics of farm people and the psychology of their political behavior, but the academic treatment of the farmer's psychology is yet to be written. Important beginnings have been made by J. M. Williams⁸² who writes what Professor Rice calls "psychological history," by C. C. Taylor in his interpretations of farmers' movements⁸³ and by L. L. Bernard in his theory of rural attitudes.⁸⁴

Studies that trace the course of personality development in the rural environment are scarce. Here, perhaps, fiction has contributed more than science, although the contribution of the careful study of farm children in Iowa under the general direction of B. T. Baldwin⁸⁵ is significant. In this investigation, the combined ef-

⁸¹ Claghorn, K. H., *Juvenile Delinquency in Rural New York*, U. S. Children's Bureau, Pub. No. 32, 1918.

⁸² See f. n. 11.

⁸³ Taylor, C. C., "Farmers' Movements as Psychological Phenomena," *Pub. Amer. Sociol. Soc.*, XXIII:153-162 (1929).

⁸⁴ Bernard, L. L., "A Theory of Rural Attitudes," *Amer. J. Sociol.*, XXII:630-649 (Mar., 1917).

⁸⁵ Baldwin, B. T., and Others, *Farm Children*, 1930.

forts of economists, sociologists, public health workers and psychologists were centered upon the study of child life in two selected but dissimilar areas. The results suggest that parental ideals are of greater significance than wealth in child development. Various types of aptitude tests were given to the children and their scores analyzed and compared by communities and with the scores of urban children. This method produced results especially suggestive to the sociologist, such as the slower tempo of rural children and differences in language proficiency. The authors recognize that intelligence is a function of environment as well as of innate ability. It is to be hoped that this excellent beginning will be followed by many careful attempts to determine the specific abilities of rural people, in terms of tests standardized for the rural environment as well as for the urban. Such scores, when correlated with significant environmental factors, would contribute much to our knowledge of personality development under rural conditions.

Under the head of psychological studies, should be mentioned also several recent attempts to study quantitatively the opinions and attitudes of farm people. These are worthy attempts, and the practical value of the results in special organizational situations is great, but as yet the scientific conclusions that may be drawn therefrom are narrow and specific.

It would be unfair to rural sociology if the writer failed to emphasize at this point that excellent contributions have been made by investigators employing a composite of several methods in the study of complex problems. For example, the series of studies of the rural church published by the Institute of Social and Religious Research combined survey, statistical and case methods in a study of that institution with illuminating results. By a combination of methods, Melvin³⁶ has produced an elaborate picture of the form and structure of Marathon, New York, in both its contemporary and historical aspects.

It appears evident to the writer that rural sociology has passed out of the preliminary stage of casual observation and intuitive generalization into a period of fact-finding characterized by a conscious effort to be objective, chiefly by means of the statistical method. The volume of monographic studies is now considerable. The

³⁶ Melvin, B. L., *The Sociology of a Village and the Surrounding Territory*, Cornell Agri. Exp. Station, Bull. 523, 1931.

generalizations are for the most part cautious, specific and of narrow application. It is to be regretted that there is not greater comparability among these studies. This does not suggest standardization but rather greater coördination to produce a greater preponderance of evidence bearing upon a given problem. Rural sociologists have been aware of this need for some time.

The stage of broad scientific generalization based upon masses of monographic studies which indicate the nature of the universe generalized has hardly arrived in rural sociology. Research workers are still exploring the numerous variables and their tangled relationships. A large number of generalizations and "laws" known to be true within narrow limits have been developed. The number will increase, and rightly so. But rural sociology is rapidly approaching the time when a greater amount of effort will need to be expended in examining the limitations as well as the applications of these generalizations and in synthesizing the respective related bodies of knowledge into systematic treatises. Sanderson's³⁷ recent treatment of the rural community as a locality group is an example. May we not look forward to similar systematic treatments of the rural population and the rural family? Such emphasis should in no way minimize the drive for new data and for specific generalizations based upon detailed analysis of such data. The future of rural sociology rests squarely upon this process. The pathways to the sources of information must be kept open, and painstaking effort must increasingly characterize the collection and handling of data.

BIBLIOGRAPHY

- Black, J. D., ed., *Research in Rural Population*, Social Science Research Council, Bull. 4, 1932.
- ed., *Research in Rural Social Work*, Social Science Research Council, Bull. 5, 1932.
- Galpin, C. J., Kolb, J. H., and Taylor, C. C., *Rural Sociological Research in the United States*, Social Science Research Council, 1928.
- Galpin, C. J., Lively, C. E., Hummel, B. L., and Zimmerman, C. C., *Rural Sociological Adult Education in the United States*, Social Science Research Council, 1930, pp. 52-87.
- Kolb, J. H., Bernard, L. L., Lively, C. E., Taylor, C. C., and Hobbs, S. H., "Next Steps in Rural Social Research," *Jl. Soc. Forces*, III: 445-458 (Mar., 1925).

³⁷ Sanderson, E. D., *The Rural Community*, 1932.

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- Sanderson, Dwight, "Scientific Research in Rural Sociology," *Amer. Jl. Sociol.*, XXXIII:177-193 (Sept., 1927).
- Taylor, C. C., *The Social Survey, Its History and Methods*, University of Missouri, 1919.
- Zimmerman, C. C., "Mathematical Correlation in the Household Budget," *Sociologus*, VIII:146-166 (June, 1932).
- "The Family Budget as a Tool for Sociological Analysis," *Amer. Jl. Sociol.*, XXXIII:901-911 (May, 1928).

CHAPTER VII

URBAN SOCIOLOGY¹

RECENT trends in the field of sociology might be epitomized in a four-word phrase—"the quest for data." Throughout the entire sociological profession scholars are turning from semi-philosophical generalizations based on common-sense observation to the collation and appraisal of factual material, whether statistical, historical or case-analytical. They have, of course, drawn upon the data and conclusions relating to other and associated disciplines, particularly economics and psychology. In recent years, however, they have been especially concerned to assemble and to interpret material bearing particularly upon their own field of interest.

This quest for data has been dogged by numerous difficulties. For the most part, sociologists have discovered that the object matter required by them does not exist, or that it occurs in so fragmentary and scattered a form as to be of little use for scientific purposes. Consequently, large outlays of time and money have been required for the building up of bodies of facts capable of scientific treatment, either by first-hand observation, as in the case of the numerous studies sponsored by the University of Chicago, or by the gathering up of existing scattered and neglected material, as in the summarizing and interpreting of case records by the Russell Sage Foundation and other groups.

Students of urban sociology have had to do their share in this type of creative investigation. Many of the phenomena of urban life must have remained largely uncharted were it not for such pioneering studies as those of Shaw, Thrasher, Zorbaugh and Mowrer. On the other hand, there are many respects in which urban sociologists have been faced by a totally different type of difficulty, namely, the existence of a larger body of factual data than could be conveniently brought together and utilized for the

¹ The material through "Census Tract Studies" is by Professor Carpenter, the section on "An Example of Urban Research Activities" by Professor Sullenger, and that on "Methods in Urban Sociology" by Professor Quinn. (Ed.)

purpose of any particular research. The student experiences two sorts of difficulties in this respect. On the one hand, he finds it hard to make sure that he has data from enough cities and enough countries to give anything approaching definitive validity to whatever generalizations he makes. On the other hand, he discovers that data which appear entirely typical for one period or stage in economic and social development may prove to be quite unrepresentative of another and later one.

In the face of the dilemma offered by the existence of an unwieldy and constantly shifting body of data, the research worker is faced with two alternatives. He can build up a library containing the statistical and other publications of official, semi-official and scientific bodies, and, by means of a staff of abstractors and librarians, can undertake to put the whole range of urban phenomena under his purview. Such an enterprise is beyond the reach of any but the most amply endowed of research agencies. Moreover, it is doubtful whether any single individual or group of closely associated individuals could at one and the same time organize and keep in operation such a vast and complex assemblage of data and derive any significant generalizations therefrom. As a practical expedient, therefore, this first alternative may be considered as unavailable to the great majority of students of urban problems.

The second alternative for the research worker in the field of urban sociology is to put himself in touch with those agencies which undertake to assemble and summarize the raw data derived from a variety of sources. The utilization of such material may offend the sensibilities of the academic purist on the score of involving in some sense a dependence upon secondary sources. To this, it may be replied that, in case of doubt, recourse may always be made to the basic material from which the summary data have been drawn. More than this, one needs frankly to assert that the meticulous insistence upon the use of primary sources which is an inheritance from the days when scholarship was concerned chiefly with textual material, is neither necessary nor possible in a field where nothing more than approximate accuracy is required and where one has constantly to remember that there are never more than twenty-four hours in the day and generally less than four

score years in the span of physical existence. The second alternative is the only one which the writer considers practicable for most students.

General Publications

So far as the writer knows, there is at present only one agency that is concerned with the assemblage and publication on an international scale of data relating to city life. This is the *Union Internationale des Villes*. This organization issues two series of publications. The first is a trimestral journal entitled *L'Administration Locale*, which is concerned chiefly with municipal administration broadly considered.² The *Union Internationale des Villes* holds triennial international conferences at which topics of general interest are discussed and papers and reports of very considerable scope and scholarship presented. In addition to the reports *in extenso* of these sessions, summaries are published in *L'Administration Locale*.

Two journals, international in scope, concerning themselves primarily with the applied side of urban sociology, and particularly with city planning are *Plans*, published in Paris, and *Die Neue Stadt*, published in Frankfurt. The latter devotes considerable attention to American cities, and is, in fact, planning a special American number for the summer of the year 1933.

Turning from the applied aspects of urban sociology to such basic topics as urban social statistics, one find at least one organization which issues semi-occasional publications of general scope on city life. This is *L'Office Permanent de L'Institut International de Statistique* at the Hague. In 1876 this organization issued a volume

² A typical number (April-June, 1930) contains special articles on the Administrative Reform of Greater Paris, the Organization of a Service for Infant Welfare in Amsterdam, and Smoke Prevention in England. Occasionally, however, more general articles dealing with such broad questions as urban growth and population changes are published. Some of the articles of this type are of considerable significance, since such authorities as "Le Corbusier" (C. E. Jeanneret) and Desnai publish in this journal. In addition, every number contains a miscellaneous section entitled *Notes et Information* which serves to keep the reader up-to-date on current statistics covering a wide variety of subjects. Thus, the number referred to above contains (pp. 105-109) a summary of the annual per capita electric power output for a number of European and American cities. During the year 1930, a supplement to *L'Administration Locale* entitled *Tablettes Documentaires Municipales* appeared. This journal is a sort of Social Science Abstracts of city life. The sections on *Urbanisation* (urban growth and city planning) and *Hygiene and Prevoyance Sociale* are of particular value to the student of urban sociology.

entitled *Statistique Internationale des Grandes Villes*. A second volume was in process of publication at the outbreak of the World War but did not see the light of day until the year 1927. It is entitled *Annuaire Statistique des Grandes Villes*. Through coöperation on the part of the reporting cities, a large measure of uniformity in classification and tabular presentation has been secured, and the resultant volume is a veritable treasure-trove of urban statistics.³ Not only does it contain a comprehensive array of data on area, population, births, deaths and the like. It also presents statistical information covering such questions as number of inhabitants per dwelling, occupational distribution, religious grouping, literacy and illiteracy and migration. The vital statistics are carried to a considerable degree of refinement, giving the principal causes of death in a number of cities.

National Publications

Although information collected on an international scale is relatively scarce, there is a mass of material dealing with separate countries. Little need be said here concerning the census enumerations of the several countries of the globe since their publications are familiar to the student.⁴ One parenthetical remark may, however, be offered concerning the collection of statistics in England. In that country the office of the Registrar-General is separate from the Census and the student needs to keep himself in touch with publications of *both* agencies in order to be sure that he has covered the whole range of information available for that country.

In addition to the regular and more or less familiar census enumerations, many countries issue official and semi-official summaries, comments and interpretations of their official data. In England this task is left to the census office itself which issues a unifying and interpretative report based on each of its decennial census

³ Only a half-dozen cities in the United States are represented, apparently through the inability of the editors to get in touch with local authorities able or willing to collaborate. Africa is represented by the cities of Cairo and Alexandria, and Asia by Kioto and Osaka in Japan, Bombay in India and Teheran in Persia. Sydney and Melbourne in Australia and Wellington in New Zealand are also included.

⁴ Where the actual census volumes are not available, they can be found summarized in considerable detail in the Statesman's Year Book, this being particularly the case for statistics in England.

enumerations. In Germany, two sets of summarizing and interpreting material are available, one being official and one semi-official. The official material is issued from the office of the Statistische Reichsamt. This bureau issues a semi-monthly publication entitled *Wirtschaft und Statistik*, to which are attached occasional special volumes or *Sonderheften*. The regular monthly bulletin contains a section on *Area and Population* and a miscellaneous section (*Verschiedenes*), each of which occasionally publishes material of value to the student of urban problems, particularly in the field of vital statistics.⁵

An unofficial source of material dealing with German cities as a whole is the *Verein für Kommunalwirtschaft und Kommunalpolitik*, whose central office is in Berlin. This organization issues *Der Deutsche Kommunal-Kalender*, or yearbook, which includes brief articles on a number of questions relating to municipal administration. Of particular interest is the section dealing with municipally-owned economic enterprises which are developed to a far wider degree on the European continent than elsewhere in Western civilization.⁶

In a number of other countries statistical summary volumes corresponding in a general way to the Statistical Abstract of the United States are issued, most of them under official auspices. Their usefulness to the student of Urban Sociology depends upon the degree to which their data are segregated according to cities.

United States

So far as the writer is aware, there is no single source of information in the United States dealing with cities as a whole that is at all comparable to the European publications just enumerated. It

⁵ Thus, the *Verschiedenes* section of the second May, 1930 number presents an analysis of traffic accidents in the city of Berlin for the years 1928-1929.

In 1930 this office issued a special volume dealing with taxation in cities of twenty thousand or more for the years 1926-1929. In 1929 it issued a similar special volume entitled *Contributions to the German Population Problem (Beiträge zum deutschen Bevölkerungsproblem)*. Certain of the data contained in this publication deal with "Groszstädten" or cities of 100,000 or over.

⁶ This same organization sponsors a number of occasional publications notable among which is the volume entitled *The Future Task of the German Cities (Die Zukunftsaufgaben der deutschen Städte)* of which Dr. Erwin Stein, general secretary of the organization, is a co-editor. This work is also concerned with the applied aspects of Urban Sociology, mainly as it concerns municipal administration.

is true that the United States Census enumerates most of its data according to "urban" or "rural" type of territory. It does not, however, maintain any consistency in this classification. Thus the population enumeration classifies as "urban" organized communities of 2,500 or more. The volumes relating to mortality statistics, on the other hand, place the lower limit for urban communities at 10,000, as does also the newly-launched enumeration of unemployment. Still another classification is adopted by the volumes reporting financial statistics of cities, for there cities appear to be cities only when they have populations of 30,000 or more. However, it is possible to achieve a certain degree of comparability in these publications so far as larger cities are concerned, since the volumes on unemployment, population and financial statistics of cities present certain summary tables classifying cities according to size of population. Here again, however, a wholly gratuitous source of confusion arises through the failure of the right hand of the Census office to keep informed concerning what its left hand is doing, since the class intervals for various types of data are not the same.

From time to time the Bureau of the Census has published summary and interpretative volumes. The most extensive series of such works appeared in connection with the Fourteenth or 1920 Census.¹

The writer cannot refrain from calling attention to the striking shrinkage, both absolutely and proportionately, in the attention devoted to questions of sociological interest by the Bureau of the Census since its absorption by the Department of Commerce. The skeletonizing of the reports on mortality strikes one as being particularly, almost tragically, drastic and short-sighted.

Much use can be made of the privately sponsored *The American City*, published monthly by the American City Magazine Corporation in New York, as well as the annual *Municipal Index and Atlas* published by the same agency. Although primarily concerned with questions of municipal engineering, such as street-lighting, sewage disposal, water supply, road-making, and the like, they do give

¹ They are entitled *Census Monographs*. The first one of these Monographs, namely, *Increase of Population in the United States from 1910-1920* (by W. S. Rosser) contains a mass of valuable material, particularly in connection with the movement of population from rural to urban areas, which is analyzed in considerable detail for certain states.

considerable attention to certain topics of sociological interest, notably, city planning and municipal finance.⁸

Local Studies and Reports

Although it is manifestly impossible for the average student in Urban Sociology to keep himself abreast of the currents and cross-currents of social change in each of the hundreds of large cities on the globe, it is, nevertheless, incumbent upon him to maintain touch with at least a representative sampling of such cities.

This task is difficult as regards American cities, largely because public administrative bodies in this country do not consider it worth while (perhaps it is not expedient!) to publish comprehensive and authoritative data concerning their activities. From time to time an occasional publication is issued which proves to be of considerable value, if the investigator happens to run across it. Particularly useful are special reports dealing with traffic problems, public health, city planning and the like.⁹

In Europe many municipal authorities regularly publish year-books and statistical volumes of considerable scope. Noteworthy among these is the biennial *London Statistics* issued by the London County Council.¹⁰

Turning from official to unofficial and semi-official publications, one finds the field more richly cultivated. Various special *ad hoc* publications appear from time to time in every city of any size, although it is sometimes difficult for the research worker to inform

⁸ Occasional articles descriptive of foreign cities are printed, such as that by Stadtbaurat Wagner of Berlin in describing the bathing beach at Wannsee, in the November, 1931 number, p. 81. Some attention is also given to police administration and crime prevention, as, for example, a brief article dealing with radio police patrols published in the number above referred to.

⁹ For example, the Department of Parks and Public Buildings, the City Planning Committee of the City Council and the City Planning Association of Buffalo collaborated in 1925 in the publication of an excellent recreational survey of the Buffalo area. Note should also be taken of the Noise Abatement Commission of the City of New York.

¹⁰ This volume should be on the reference shelf of every University library in the country. Its four hundred pages deal with virtually every phase of the economic and social life of the London metropolitan area, running all the way from population and vital statistics to municipal finance. Particularly illuminating are the diagrams published in the volume for 1928-1930, pp. 26-27, showing the steady decrease in population in the central London boroughs and the corresponding increase in the outer areas during the past twenty or thirty years.

himself of their existence or to lay his hands on them, once they are issued.¹¹

More than this, there have recently been completed a series of elaborate and exhaustive sociological and economic studies of the two greatest cities in the world, namely, London and New York. The New York study, sponsored by the Russell Sage Foundation, is *The Regional Survey of New York and Its Environs* and covers eight survey volumes in addition to two "Plan" volumes. Although all of the volumes are of the greatest value to the student of city life, particular attention should be called to Volume I, *Major Economic Factors in Metropolitan Growth and Arrangement*; Volume 2, *Population, Land Values and Government*; and Volume 8, *Physical Conditions and Public Services*. This last contains the most adequate analysis of the much neglected subject of municipal economy (in the literal usage of that term) that the writer knows.¹²

The most socio-economic study of London, entitled *A New Survey of London Life and Labour*, represents an attempt to go over the ground covered by the late Charles Booth and his associates in their monumental pioneer study of forty years ago. The work has been carried on under the direction of one of the collaborators of the earlier study and has been financed by a number of American and English foundations, including the "companies" that underwrote the researches of Galton and Pearson. The first two volumes only of this work have appeared. Of these the initial number of the series, entitled *Forty Years of Change*, might well become the *vade mecum* of every urban sociologist. Among the topics covered are area and population, cost of living, house rents and crowding, travel and mobility, health, education, public amenities and means of recreation, poor law relief, and crime. Many of the conclusions reached are startling, including one to the effect that post-war unemployment, at least up until the end of the year 1928, has not been

¹¹ An important contribution to the literature of urban health problems is, for instance, embodied in the New Haven Health Survey of 1928. Particularly noteworthy is the evidence that it presents to the effect that the incidence of death by heart disease in the higher age groups is beginning to show a falling off after a long period of rapid increase throughout the urban populations of the country.

¹² In this volume, for instance, (page 99) it is brought out that the amount of refuse (ashes, garbage, rubbish and sweepings) that has to be disposed of every year by the city of New York reaches the astonishing total of 1,484 pounds per capita. Garbage alone amounts to 184 pounds per person per year.

so very much greater for London than during the hungry years of the 1890's.¹³

The sections dealing with population change present striking evidence of the trend observable throughout the large cities of the western world toward de-centralization.¹⁴

Census Tract Studies

As has been stated, the investigator finds himself confronted by numerous obstacles when he seeks to keep in touch with economic and social developments in any but the largest cities in this country and Europe. There are, however, two additional sources of information which may be of use in particular instances. The first is the Census-by-Tract in certain cities in the United States. These tract tabulations have been in effect for a number of years in a few cities, but it was not until the 15th or 1930 Census that they attained any considerable development. In this year tract tabulations were undertaken in 18 cities.

The tabulation by tract involves the dividing of an urban area into a considerable number of relatively uniform districts, these districts being approximately uniform in population and, so far as practicable, representing homogeneous social and economic conditions. Such a tabulation permits a much closer and more realistic analysis of sociological differentials within an urban area than the traditional enumeration by wards which has heretofore prevailed.

¹³ It should, however, be observed that London, being less industrialized than such regions as Lancashire, Wales and the Clydeside is not altogether typical of the English working classes as a whole.

¹⁴ Such central London boroughs as "The City," Finsbury and Holborn have decreased by from 30 to 60 per cent in the thirty years since 1891. The whole county of London, which includes such relatively distant areas as Greenwich, Woolwich and Hammersmith, has increased by only 6 per cent in this same period. On the other hand, the area extending from 10 to 12 miles from Charing Cross has increased in population by 112 per cent. These tables may profitably be studied in connection with the diagrams in the recent volumes of *London Statistics* already referred to.

Another interesting finding adduced by this volume has to do with the correlation between education and infant mortality. After hovering around a rate of 150 per thousand births during the period 1840-1900, the rate began steadily and sharply to decline. After vainly attempting to associate this phenomenon with various public health measures, the authors of the chapter conclude that the most important antecedent factor was the establishment of compulsory education in the year 1870, in that it insured that about thirty years later, i.e., 1900, there would appear a generation of parents better equipped with a knowledge of the rudiments of infant hygiene and having a greater sense of responsibility for the care of their children than had yet been known among the working classes of England.

Moreover, since tract lines are kept intact from one Census period to another, it is possible to secure historical comparisons impossible under the older plan which depended upon the constantly changing ward boundaries of the average American city.

In certain instances other relevant data are tabulated by public and private agencies on tract lines so that it is possible to construct a comprehensive, statistical cross-section of an entire urban area. A model of such a study is embodied in the researches of the Chicago University group, particularly by Shaw.

It should be said that any city of metropolitan proportions can secure a tract tabulation if it is willing to raise the not unduly large sum of money required by the Census for meeting the cost of such a tabulation, and is able as well to bring its desires vividly and insistently before the proper officials. The tract tabulations are not published in the Census volumes to any considerable extent. Copies of them are furnished to interested agencies in the cities concerned and are, of course, also available in the Census office at Washington. In addition, certain agencies, particularly in Cleveland,¹⁵ have undertaken to publish their analyzed census tract data. In Buffalo the Bureau of Business and Social Research of the University of Buffalo has published the basic tract table and has also issued an analysis of retail trade by tract areas.¹⁶

A second source of current urban data is the statistical research bulletin of the urban university.¹⁷

An Example of Urban Research Activities

Our American cities are beginning to recognize and appreciate the value of social research. When city planning boards, social organizations, governing bodies, and educational and religious institutions begin to seek authentic data on conditions in their midst and appeal to the urban sociologist for this material, the opportunity

¹⁵ The following have been published by the Cleveland Health Council of Cleveland, Ohio: Population by Census Tracts, Cleveland and Vicinity, with Street Index and 3 maps, Population Characteristics by Census Tracts, Cleveland, Ohio, Tuberculosis and Economic Strata, Unemployment and Economic Status, Infant Mortality and Economic Status.

¹⁶ Retail Trade Areas in Buffalo by Edmund McGarry, Statistical Survey Supplement, Volume 7, No. 8a.

¹⁷ Such bulletins are available for Buffalo, Denver, Omaha, Providence and Pittsburgh, and possibly other cities.

becomes ours. Research bureaus are being set up to study more carefully, to tabulate, analyze and explain in the terminology of the layman the source material placed at our disposal. Urban and municipal universities are taking the lead in such activities. Crude data are waiting the "magic" touch of the research student to quicken and enliven them so that generalizations may be drawn and plans for constructive future activity may be prepared more scientifically.

In order to make my discussion more concrete, I select Omaha as an example of research done on the basis of local materials, because I am familiar with it. The sources of materials available for urban sociology in Omaha are typical of the vast amount of research data available in the average American city. Our University, a municipal institution, affords an adequate base from which to work. In order more efficiently to synthesize our research activities, a Bureau of Social Research was established by the Board of Regents as an adjunct to the Department of Sociology. The next step in this general procedure was to establish a friendly rapport with the seventy odd public and private agencies that have in their possession valuable source material. In most instances, these agencies are quite willing to cooperate in furthering legitimate scientific inquiry on the basis of their records. Of course, it is understood that only faculty members and advanced students of tested trustworthiness are used as field workers in these investigations.

In the field of crime and delinquency,¹⁸ the police records, though poorly kept, furnish indices of very definite types of social behavior. For instance, the automobile accidents reports and the time and place of various types of crimes in the city are being used in a project in which we are now engaged. In this same general field, we have found the Juvenile and Domestic Relations Court a mine of social data for the study of divorce and domestic trouble cases,¹⁹ mothers' pensions, juvenile delinquency, dependency and neglect. The correlations between these various phenomena presents a vivid picture of the pathology of urban life. In the field of dependency, the files of the Family Welfare Association, American Legion, Jewish Relief, County Department of Relief, Council of Churches,

¹⁸ Sullenger, T. E., *Social Determinants of Juvenile Delinquency*, Univ. of Omaha, 1930.

¹⁹ *Ibid.*, *A Study of Divorce and Its Causation in Douglas, County*, Univ. of Omaha, 1928.

Catholic Charities, as well as the records of the various other institutions, furnish data on many phases of family life and economic status. Source material pertaining to health may be found in State vital statistics reports, the reports and records of the City and County Health Departments, the public schools, visiting nurses, the Tuberculosis Association, dispensaries of the two medical colleges, hospitals, and other minor sources.²⁰ Such records carefully analyzed with relation to each other show distinct trends in the health of urban population.

Significant material relative to recreational life of a city may be obtained from records and reports of the so-called character building organizations, such as settlements and centers, the city welfare department, the public schools, churches,²¹ clubs of various kinds, the City Park Department, the Urban League, and the large industries, and also from the motion picture houses and other commercial recreation concerns.²² A source that is always available is the records of the public schools in the City Board of Education, as well as more detailed information from the high schools. Such items as occupation of parents, number of children in a family, nativity of parents, mobility, race,²³ sex, truancy, activities, and grades is available. We are now using these records in an effort to determine the relation of achievement of high school students to the occupations and mobility of parents. We have also used them in our brief study of the Immigrant in Omaha,²⁴ to determine geographical location, size of immigrant families, and other significant information about immigrants that throw light on the problem at hand. The files of the attendance department are also proving invaluable in another project.

The Chamber of Commerce, through its various departments, has a great deal of social and economic data, some of which must be carefully tested for its validity.²⁵ We in Omaha have found our five

²⁰ Sullenger, T. E., and Carlson, *Hospital Social Service in Omaha*, Univ. of Omaha, 1930.

²¹ Sullenger, T. E., *Social Ministry in an American City*, Univ. of Omaha, 1924.

²² Sullenger, T. E., *The Neighborhood: A Study of Ward Seven in Omaha*, Univ. of Omaha, 1933.

²³ Sullenger, T. E., and Kerns, *The Negro in Omaha*, Univ. of Omaha, 1931.

²⁴ Sullenger, T. E., and Hill, *The Immigrant in Omaha*, Univ. of Omaha, 1932.

²⁵ Sullenger, T. E., and Kerns, *Industrial and Business Life of Negroes in Omaha*, Univ. of Omaha, 1932.

leading packing plants valuable sources of research material that have never before been utilized.

In Omaha, the Confidential Social Service Exchange has proved very helpful as a lead to possible fertile sources. It has a card for each family that has been served by one or more of the forty-six public and private philanthropic organizations of the city. The changes in address, nationality, race, number of children, the name of agencies and date of contact are all on the card. Since some agencies keep more complete records than others, one can follow the case back to the agency with the best records, and thus get the complete history and case record of that particular family. Interrelation of the many factors that make up the total situation can be studied profitably by the use of this source. Such data have been invaluable in our studies of juvenile delinquency and truancy.

Much emphasis is now being placed on social fluidity and mobility in urban centers. Extensive source material is on the pages of city and telephone directories, gas, light, and water company files, and in the real estate board records. Trends in shifts in population may be ascertained by studying building permits, school enrollments in the various grade schools, and the registration lists of voters. Information on housing in Omaha as in other cities is very meager. Nevertheless, some is available in the City Department of Building, where permits are issued and old buildings are condemned. Old newspaper files furnish an insight into attitudes and processes of social movements as they are indicative of trends of thought. Such data aid in the interpretation of phenomena in relation to their original settings.

Another fertile source for study by the student of urban sociology has recently been brought to our attention by the application of the techniques of cultural analysis to the problem of immigration and the assimilation of the immigrant.²⁶ These two problems are primarily urban since about ninety per cent of the foreign born in the United States reside in urban centers. Every city of any size has its immigrant colonies and isolated foreign born groups. The customs, traditions, mores and folkways of these groups throw much light on present day urban problems. The interpretation of these cultures in terms of our own afford a basis for much thought.

²⁶ Sullenger, T. E., and Harvey, *A Survey of the Cause and Extent of Crime among Foreigners in Omaha*, Univ. of Omaha, 1924.

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The urban and municipal universities are constantly faced with the task of discovering and rediscovering current source material for research and thus through their departments of Sociology utilize the material for sociological generalization and social control. In our Omaha studies, we are endeavoring to discover trends and follow them by means of base maps of the city. The significant data are being placed on these maps as rapidly as possible.²⁷ Other material is being studied and analyzed, and then put in printed or mimeographed form for use by agencies of the city as well as by the class in urban sociology. The class discussions become vitalized by the use of such materials concerning their city and the social life about them. The urban sociologists have much to learn in these matters from their colleagues, the rural sociologists.

Methods in Urban Sociology

Many of the methods used in Urban Sociology have been discussed in other parts of this volume, particularly in the chapters on Human Ecology, The Community, and Rural Sociology. These previous discussions have not been duplicated here. This section is therefore limited to a brief, systematic summary of methodological procedures with illustrations from concrete studies. The citations, which represent selected samples from an almost overwhelming mass of materials, do not afford an exhaustive picture of urban methodology. The following phases deserve special notice:

1. *Historical and geographic method.* Studies of the location and growth of cities have made use, almost exclusively, of methods of historical and geographic investigation. General treatises on the growth of cities are represented by Weber's *Growth of Cities* (1899) and Gras' *Introduction to Economic History* (1922). Numerous concrete, historical studies of specific cities may be illustrated by Carpenter's analysis of the developmental history of Rome.²⁸ Geographers and economists have contributed to the methods of urban study through analyses of specific cities in which they have

²⁷ This system of recording data on base maps, first employed extensively by social and governmental agencies in Cleveland and Chicago, was later highly developed as a research technique by the Department of Sociology at the University of Chicago, and is now in general use in departments of sociology and research organizations. (Ed.)

²⁸ Carpenter, Niles, *The Sociology of City Life*, 1931, pp. 63-69.

stressed topographic factors of the local site, resources of the hinterland area, transportation and communication facilities, breaks in transportation, markets, power, labor, and other items of commercial-industrial importance.²⁹ Cities which have been analyzed by historical and geographic methods have been grouped into types for which generalized descriptions and natural histories have been attempted.

2. *Historical and community case studies.* Methods used in social surveys and community case studies were discussed in the chapter on "The Community." Somewhat different from these were the cultural anthropological methods used by the Lynds in their study of *Middletown* (1929). Analyses of segregated culture areas within the city have been carried on by a combination of the above methods.³⁰ Studies of the adaptation of institutions to different residential areas³¹ require an approach which, at its best, involves case studies of institutions in terms of the total situation of the area.

3. *Analysis of personal case histories and documents.* The influence of city life upon the development and disorganization of personality has been studied by various social-psychological methods, of which the analysis of case histories and personal documents has been most fruitful. Wirth has examined Jewish personality types³²; Shaw has analyzed the development of delinquent attitudes in boys³³; while Thomas³⁴ and Cavan³⁵ have investigated the disorganization of personalities under the impact of urban life.

4. *Statistical methods* of practically every type have been used in the study of the city. Predicting growth of future population is a problem constantly faced by statisticians of urban life.³⁶ The modal monthly rental, a statistical average, has been used as an index to the economic status of local neighborhood areas.³⁷ Ogburn³⁸ has made use of time-series in tracing trends in urban life. He has

²⁹ See *Jl. Geog.*, XXI:205-44 (Sept., 1922), for a number of such analyses.

³⁰ Zorbaugh, Harvey, *The Gold Coast and the Slum*, 1929.

³¹ Reckless, Walter, *Vice*, 1932.

³² Wirth, Louis, "Some Jewish Types of Personality," *Pub. Amer. Sociol. Soc.*, XX:90-96 (1926).

³³ Shaw, C. R., *The Jack Roller*, 1930; *The Natural History of a Delinquent Career*, 1931.

³⁴ Thomas, W. I., *The Unadjusted Girl*, 1923.

³⁵ Cavan, Ruth Shonle, *Suicide*, 1928.

³⁶ Jeter, H. R., *Trends of Population in the Region of Chicago*, 1927.

³⁷ Unpublished studies, Department of Sociology, University of Cincinnati.

³⁸ Groves, E. R., and Ogburn, W. F., *American Marriage and Family Relationships*, 1928.

contrasted urban-rural marital conditions and correlated them with factors of mortality, crime and insanity. The United States Bureau of the Census, after rejecting numerous statistical criteria, has delimited the major metropolitan regions of the nation by analyzing density of population.³⁹ Park has marked out the Chicago region through a study of newspaper circulation.⁴⁰

A most significant type of statistical study has been the determination of urban gradients.⁴¹ Studies of areas, spaced at regular intervals along radii extending from the central business district have shown that certain indexes, such as home ownership, tend to change in approximately a geometric ratio as one moves outward. The construction of population pyramids along significant radii has proved valuable in studying population composition and mobility.

5. *Maps.* Maps are of great value in studying the city. An urban base map,⁴² showing the area used by commerce, industry, transportation and parks is essential to the interpretation of other ecological data which may be superimposed upon it. Bartholomew,⁴³ a city planning engineer, who made detailed field surveys of the utilization of urban land, has reduced his findings to a series of maps showing the exact location of each type of utilization. These maps afford an interesting check on the concentric circle conception of the city. Applebaum,⁴⁴ in the Department of Geography at the University of Cincinnati, has used property data maps to produce an accurate, block-by-block, population spot map. This has been illuminating, both when superimposed upon a base map and when used as a base itself, upon which to plot ecological index data. Applebaum measured the front-foot space occupied by each type of retail outlet in secondary retail centers and studied gradients of retail activity. Confronted with Cincinnati's rugged topography, he was forced to construct an isochronal map on which distances were measured in terms of minutes rather than miles.

Maps showing the distribution of diseases, crime, poverty, insanity,

³⁹ United States Bureau of the Census: *Metropolitan Districts*, U. S. Government Printing Office, 1932.

⁴⁰ Park, R. E., "Urbanization as Measured by Newspaper Circulation," *Amer. J. Sociol.*, XXXV:60-79 (July, 1929).

⁴¹ Burgess, E. W., "The Determination of Gradients in the Growth of the City," *Pub. Amer. Sociol. Soc.*, XXI:178-184 (1927).

⁴² *Region of Chicago Base Map*, University of Chicago Press, 1926.

⁴³ Bartholomew, Harland, *Urban Land Uses*, 1932.

⁴⁴ Unpublished manuscript, Library of Department of Geography, University of Cincinnati.

and other economic, medical and social data have been widely developed in census tract cities where they have proven valuable in the study of urban pathology. Mowrer,⁴⁵ by plotting family data on maps, has discovered distinctive areas of family life and of domestic disorganization. Time series of maps have additional values. Hurd has collected several such series by means of which he made generalizations concerning the speed and direction of growth of cities.⁴⁶ The New York Regional Plan Committee has studied location trends and tendencies in the New York area by plotting and comparing the locations of various utilizations for the years 1900 and 1922.⁴⁷ The speed and direction of invasions of Negroes into white residential areas is being studied in Cincinnati.⁴⁸ Series of maps have been, and are being, prepared at five-year intervals. The house by house residence of blacks and whites is plotted in detail on maps and changes noted showing the progress of the invasion.

6. *Ecological indexes.* The use of ecological indexes to social life is an important methodological procedure which merits further careful testing.⁴⁹ The underlying idea is that certain ecological phenomena, such as mobility and land values, are accurate indexes to phases of the more elusive and complex social life. If true, it affords a simplified, economical short-cut to the study of social organization.

7. *The natural organization of the city.* The hypothesis of natural, concentric circle zones of residence radiating from the central business section offers an interesting and important frame of reference for the ecological organization and structure of the city. The validity of this assumption has been challenged by investigators who have declared that distorting factors so frequently disrupt or obscure the concentric circle pattern as to make it useless as a tool for study.

8. *Census Tracts.* The organization of population data by permanent, geographic, census tract areas is now laying the basis for future studies of population distribution, composition and movement

⁴⁵ Mowrer, E. R., *Family Disorganization*, 1927.

⁴⁶ Hurd, R. M., *Principles of City Land Values*, 1903, 75-89.

⁴⁷ Haig, R. M., and McCrea, R. C., *Major Economic Factors in Determining Metropolitan Growth and Arrangement*, Vol. I, Regional Plan of New York and Its Environs, 1927.

⁴⁸ Unpublished studies, Department of Sociology, University of Cincinnati.

⁴⁹ *Research in the Social Sciences*, 1929, pp. 3-49.

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within large cities. The particular merits of the census tract is that it affords permanence, small sized units, and standardized boundaries. Census tract studies promise to make use of practically all approved statistical methods. The Federal census data which afford detailed information concerning age, sex, nativity, parentage, literacy, marital status, citizenship, occupation, size of family, type of dwelling and value of home become more valuable when supplemented by comparable data from the annual school census, and by compilations from the records of private and public organizations and agencies. Their value increases year by year as they are arranged in time series and made the basis of studying trends. The census tract method promises to be one of the most fruitful devices in future studies of the structure and growth of the city.

BIBLIOGRAPHY

See bibliographies of Chapters IV-VI; also citations included in the body and footnotes of this chapter.



CHAPTER VIII

CULTURAL AND FOLK SOCIOLOGY

I. The Sources

THE sources of both folk and cultural sociology are among the most numerous of all of those of the several branches of sociological science. They lie primarily in the behavior forms of the peoples, both primitive and advanced; in their literatures, both oral and written; in their institutions, including their customs, traditions, rituals, codes, and even the physico-social deposits of their cultures; in their languages, and language forms; and, finally, in the archæological remains, including the physico-social and the psychosocial survivals. While folk sociology is concerned primarily with the beliefs and behavior of the peoples and the masses, and cultural sociology with all accumulations of human effort, whether of the folk or of the classes and of exceptional individuals, both must inevitably seek their data from much the same deposits and strata. Like gold and silver, the two ores run much together, but may be separated by the skilled technologist, that is, the investigator.

1. The most important of all of the sources of data in these two fields is the peoples. Where it is possible, peoples should be studied in action. Until recently, most attention has been given to the study of surviving primitive peoples, and the necessity of studying these peoples is especially great, since all of them are in process either of disappearing under the stress of strong competition of the white man and his new technologies, or of having their cultures engulfed and transformed because of the high penetrative power of modern means of communication.

The more advanced peoples must also be observed and their cultures recorded. This process of recording advanced cultural traits and processes has been going on for more than one hundred years, alongside of the study of the primitive peoples, and in much the same way, that is, in the "observations" of travellers in all parts of the world. Just as the Spanish conquistadores and the Jesuit

fathers left a vast amount of valuable recorded matter regarding the American Indians,¹ similarly reports of travellers and missionaries in other parts of the world have opened up to us much of the culture and folk practices and beliefs of Asia, Africa, and the islands of the sea, in records too numerous to be cited, covering a period from half a millennium B.C. to the present day.² Beginning early in the nineteenth century, there was initiated a series of travels and explorations by men of considerable training in careful observation who recorded with care what they saw.³ These men brought a flood of fairly dependable material about primitive peoples to enrich the knowledge of the European and American literary and scientific worlds. At about the same time a new missionary movement, the Protestant campaign to Christianize the world in the nineteenth century, produced an extensive literature about primitive peoples which, while biassed by cultural antagonisms and folk beliefs and prejudices and often written by men who were not adepts either in literary analysis or in careful observation, was nevertheless often the product of a protracted residence among the peoples whose cultures it was intended to describe.⁴ A somewhat similar body of literature exists in the form of journals and travels and lives of itinerant frontier ministers of the various Protestant denominations of the United States and Canada,⁵ and in the lives of the Friends who struggled to defend and propagate their faith in England.⁶ The nineteenth century also introduced, or at least brought into great prominence, a new type of cultural description of much im-

¹ See Thwaites, R. G., *Jesuit Relations and Allied Documents*, 73 vols., 1896-1901; *Lettres Edifiantes et curieuses, écrites des Missions étrangères, avec les Annales de la propagation de la Foi*, 40 vols., Lyons, 1819-1854; also, for further references, Bernard, L. L., "The Social Sciences as Disciplines: Latin America," *Encyc. Soc. Sciences*, I:301-320.

² See the works of Herodotus, Strabo, Tacitus, and other ancient and classical writers; also the *Travels* of Marco Polo, Hakluyt's *Voyages*, Cook's *Voyages*, Mandeville's *Travels*, and the similar records of numerous other travellers.

³ See, e.g., Burckhardt, J. L., *Travels in Nubia*, 1819; *Travels in Syria and the Holy Land*, 1822; *Travels in Arabia*, 1829; *Arabic Proverbs, or the Manners and Customs of the Modern Egyptians*, 1830; Livingstone, D., *Missionary Travels and Researches in South Africa*, 1857; Barth, H., *Travels and Discoveries in North and Central Africa*, 1857-8; Ewbank, Thos., *Life in Brazil*, 1855.

⁴ See, e.g., Williams, T., *Fiji and the Fijians*, 1870; Calvert, J., *Missionary Labors among the Cannibals*, 1870; Thompson, W. M., *The Land and the Book*, 2 vols., 1858.

⁵ See, e.g., Asbury, Francis, *Journal*, 3 vols.; Cartwright, Peter, *Autobiography*, 1856; Brunson, Alfred, *A Western Pioneer*, 2 vols., 1879.

⁶ Evans, W. and T., *The Friends' Library*, 14 vols., 1837-1850.

portance for the cultural sociologist. It now became the vogue for leading publicists to visit and analyze the social and political institutions of the more civilized peoples, and there resulted a vast number of works, some of them of genuine sociological importance, of this character.⁷ Closely analogous to such recorded observations as these last mentioned were the writings of observers of the culture and institutions of their own or related peoples.⁸ All together, these writings constitute a valuable, although not scientifically critical, fund of data about peoples or cultures that are no longer accessible for equally direct observation.

2. The literatures of a people are almost as important sources of data for cultural and folk sociology as are the overt behavior and other forms of living culture of a contemporaneous people. Literature, the fine and the useful arts, war and political behavior, education and science, religious beliefs, rituals, ceremonials, etc., classified under the functional activities of a culture either as institutions, movements, or cultural planes and currents, may be studied by direct observation and record. They are being so analyzed constantly in our scientific monographs, philosophic and literary journals, sociological, economic and political studies. But literature may also be considered functionally as a separate field of study of great importance for the cultural and folk sociologists, since it, even more than art and ritual,⁹ offers a comprehensive and fairly clear record of the cultural achievements and cultural forms and interpretations of man. Art, in its various forms, does this also, but specializes more particularly in the overt and emotional forms of cultural and folk behavior; while literature, besides including these aspects in some degree, alone gives a fairly adequate analysis of the beliefs and opinions and knowledge of mankind, that is, of the inner life.

⁷See, e.g., Hall, Basil, *Travels in North America, 1827-8*, 2 vols., 1829; Trollope, Mrs., *Domestic Manners of the Americans*, 2 vols., 1832; Martineau, Harriet, *Society in America*, 3 vols., 1837; Combe, Geo., *Notes on the United States*, 2 vols., 1841; De Tocqueville, Alexis, *Democracy in America*, 2 vols., 1840; Bryce, James, *The American Commonwealth*, 2 vols., 1888; Arnold, Matthew, *Civilization in the United States*, 1888; Borrow, George H., *The Bible in Spain*, 1843; Wells, H. G., *The Future in America*, 1906; Laing, Samuel, *Observations on the Social and Political State of the European People in 1848 and 1849*, 1850; Williams, S. W., *The Middle Kingdom*, 2 vols., 1883; Brooks, J. G., *As Others See Us*, 1908.

⁸See, e.g., Taine, H. A., *The Ancient Regime*, 1896; Bulwer-Lytton, H., *England and the English*, 2 vols., 1833; Miller, Hugh, *First Impressions of England and Its People*, 1857.

⁹See Harrison, Jane, *Themis*, 1912, and *Ancient Art and Ritual*, 1913.

The range of literature, considered as a major source of data for cultural and folk sociology, is vast and its schema complicated. We have already made bare mention of some of those types of cultural field studies and sources for such studies—the more or less technical early literature of the field—of major interest to the sociologist. Literature—both oral and written—may, perhaps, be divided into five or more classes.¹⁰ (1) Primitive story, myth, tale and legend, were apparently spontaneous in origin and random in character and intent, yet quite clearly illustrate, however unconsciously and unintentionally, the folk beliefs and some of the cultural achievements of the people. (2) Epic, chronicle, history, portray in a fairly continuous and connected form the life history of a people or a period and emphasize the crises, major aims and struggles of that people. This type of literature displays some sort of social unity and continuity as its central theme, while cultural instruments and folk attitudes are disclosed incidentally. (3) Beginning earlier than the preceding type of literature are lyric poetry and drama. The former discloses individual conflicts, crises, aspirations, urges, defeats, and ecstasies. It is essentially subjective and inverted in character and is an invaluable source of knowledge about one aspect of culture. What, for example, could be more revealing of the inner life of the people than the Chinese lyric poetry of the T'ang dynasty,¹¹ than the Italian and Elizabethan lyrics and sonnets of the time of the renaissance? The drama, on the other hand, reveals not only personal, but also social, conflicts and struggles. It marks not merely the tendency of a people to interpret and philosophize, to objectify, its personal problems and struggles, but also to reflect upon the conditions of existence and the forces and fates that dominate men. It is a forerunner of philosophy; or, better, a literary and artistic form of philosophy. Following the epic and the history,¹² it became the most powerful form of literature¹³ in Athens preceding the great philosophers. A similar succession has been observable in Europe in more modern times. Thus the Elizabethan drama succeeded the epic and idyllic period and in turn gave way to the more philosophic literature of the classical or

¹⁰ See Krappe, A. H., (bibliography) for a somewhat different classification.

¹¹ See Giles, H. A., *A History of Chinese Literature*, 1901, pp. 143-188.

¹² E.g., Homer, Herodotus and Thucydides.

¹³ The reference is to the works of Æschylus, Sophocles, Euripides and Aristophanes. Never before nor since has such powerful drama been written.

Augustan period. (4) Allegories, parables, proverbs, orations, essays, the philosophy of history, lead up to academic philosophy proper and themselves belong to the category of philosophy. None of these is satisfied merely to tell a story or to express an attitude or a wish, but must reflect upon the phenomena of life and action and interpret them. (5) Last of the forms of literature, and the most prosaic, but also the most dependable and informative is science. It is tested knowledge, and to this category belong the sociological disciplines. From all of these forms of literature valuable data for the reconstruction and interpretation of culture and folk beliefs can be drawn—from the earliest forms by incidental inference and by synthesis, but from the later or philosophic and scientific forms by direct and open appropriation. More and more the literatures of peoples are being analyzed for the ore of scientific cultural data which they yield.

3. Closely bound up with the literatures are the languages, for the latter are the carriers of the former. Since the days of Vico, both have been recognized as important sociological sources. In the nineteenth century the brothers Grimm, Max Müller,¹⁴ and others undertook to work out a culture history interpretation of the so-called Aryan peoples on the basis of philological studies. Although the Aryan "myth" was exploded after it had become a major item of sociological interpretation, the value of language study as a source of cultural sociological data was not thereby destroyed. Modern language analysis is an invaluable adjunct to the tracing of culture diffusion, to the unravelling of kinship relationships and social organization, to the interpretation of religious, social and other concepts, as well as to an understanding of the important forms and methods of thought of a people. The very organization of a language—its structure and its forms—is both determinative and indicative of the logic, social and individual, of a people or of an age. Today the psychology of language has largely replaced the static morphological interest; and tomorrow we may expect the sociological analysis of language to become dominant. It may even become one of the major subdivisions of sociology; certainly of cultural sociology.

¹⁴ See, e.g., Müller, F. M., *The Science of Language*, 1861-1864.

4. Finally, among the important sources of data for cultural and folk sociology is the body of archæological remains, as they exist in the field and in museums. Archæological objects are of necessity material forms of culture and are, therefore, of use to the sociologist primarily as a basis for the drawing of inferences. Sociology studies behavior, but many valuable sociological data can be inferred from the tools, utensils, weapons, burial urns, the objects buried with the dead, posture and orientation of buried skeletons, wounds, fractures, mutilations, beauty culture implements, paints, pomatums, idols, images, dwellings, fortifications, temples, means of transportation, the arrangement of artifacts, the association of the bones of different animals, and various other observable archæological facts.¹⁵ Of course, such data are only inferences arrived at by the method of analogy, but they are none the less extremely valuable as a means of reconstructing the folk behavior and the cultural achievement and organization of the past.

The most available and the most valuable sources of data for cultural and folk sociology, however, are always to be found in the intensive study and analysis of existing peoples. But, since perspective is as necessary in sociology as elsewhere, it is essential to have recourse to archæological remains and to the languages and the literatures of the past for supplementary data.

II. *Methods of Investigation*

We have already referred, in passing, to numerous early studies of peoples and groups, some of which were wholly incidental to the purposes of cultural and folk sociology. Others of these studies, however, were intended primarily to record the culture of the people described, although not always for strictly scientific purposes.¹⁶ Indeed it was not until late in the nineteenth century that cultural accounts of primitive peoples came to have definitely scientific

¹⁵ Childe, V. G., *The Dawn of European Civilization*, 1925; Massingham, H. J., *Downland Man*, 1926; MacCurdy, G. G., *Human Origins*, 2 vols., 1924; Osborn, H. F., *Men of the Old Stone Age*, 1915.

¹⁶ Marco Polo's *Travels* and the accounts of most other early travelers were intended either to arouse or to satisfy the curiosity of readers or were directed primarily to explain a particular cultural situation—such as the religious—and to make propaganda in favor of some undertaking or movement, especially in favor of missionary enterprises.

motivations.¹⁷ Since that time the method of studying both primitive and modern peoples has been rigorously overhauled, systematized and schematized according to scientific principles. The groups or peoples as wholes have been broken up for purposes of study into local, regional, and national areas, on the one hand, and functionally segregated into institutions, movements, and cultural planes and currents, on the other hand.

The older data of the relatively uncritical studies are not now much used by investigators and generalizers in cultural and folk sociology. New and more careful types of investigations have been undertaken to supply the working cultural sociologist with data. Here the case method of controlled observation is of chief importance. A particular people of limited population and extent or some particular village or town is selected for the investigation. The investigator himself is, or should be, a person thoroughly trained in anthropology and ethnographic methods, in psychological techniques and in sociology. He should also know a good deal about linguistics—the more the better—, archæology, geography, and other kindred sciences. Possessing more or less of such equipment, he goes to live among the people and makes friendly contacts with them, sometimes becoming a member of the tribe. This gives him access to many things he would not otherwise come at easily. He studies the life of the people in all its phases, probably fixing upon some of the more outstanding and characteristic aspects for special analysis and elaboration. There have been many such case analytic studies of whole peoples in the last forty or fifty years, resulting in a fairly large body of authentic cultural data regarding peoples studied intensively in relation to their physical and geo-

¹⁷ The descriptions of modern peoples referred to may be said to have made the transition from the literary and recreational motives over to the scientific somewhat earlier. The scientific analysis of languages and literatures was beginning to be developed from a sociological point of view at about the same time, and the sociological study of archæological facts was initiated in the last third of the nineteenth century, modelled somewhat on earlier studies of classical and Hebrew antiquities. For studies of primitive peoples see Reports of the Bureau of American Ethnology; also Lubbock, John, *Origin of Civilization*, 1870; Tylor, E. B., *Primitive Culture*, 1871; Quennell, M. and C.H.B., *Everyday Life in the New Stone, Bronze and Early Iron Ages*, 1923; Osborn, H. F., *Men of the Old Stone Age*, 1915. For studies of historical archæology see, e.g., Upham, T. C., *Jahn's Biblical Archæology*, 1823; Nevin, J. W., *A Summary of Biblical Antiquities*, 1829; Bojesen, E. F., *A Manual of Greek Antiquities*, tr. T. K. Arnold, 1847; Ramsey, W., *A Manual of Roman Antiquities*, 1851; Robiou, F., and Delaunay, D., *Les Institutions de l'ancienne Rome*, 3 vols., Paris, 1884.

graphic backgrounds. Such studies give us highly functional analyses of the social life and cultural achievements of peoples. The peoples themselves are usually sufficiently small in numbers that they can be studied as units entire.¹⁸

Special investigations of literatures and languages by means of such field studies were begun in the last third of the nineteenth century. The methods of collection and the analysis are being constantly improved. The anthropologist or folk sociologist establishes residence among a people, learns their language, and listens to their tales and records them and observes their ceremonials and records their songs and rituals.¹⁹ Field studies of languages are made in a similar manner.²⁰ Library and museum studies of both languages and literatures normally follow upon the collection of considerable bodies of field data of the character here described.²¹ Field and library studies of the philosophies, or the ideas and thought systems, of a people are made in much the same manner.²² Thus, in the study of folk ideas, as well as in the investigation of folk literature and language, the investigator must live with the people, gain their confidence, fall into a sympathetic attitude toward their philosophies, watch for all expressions of ideas, and record and interpret them faithfully and accurately in the light of his background knowledge of their culture. Practically nothing can be done by the student of primitive culture if he uses a pencil and a schedule and makes a hurried visit to a people to ask formal questions. He must live and observe and absorb their culture. Most of it cannot be stereotyped in question and answer form, and he will not get frank and true answers unless he has established confidence

¹⁸ See Rivers, W. H. R., *The Todas*, 1906, for an excellent example of this type of monographic case study; also Jenks, A. E., *The Bontoc Igorot*, 1905; Kidd, D., *The Essential Kaffir*, 1904; Dorsey, J. O., *Omaha Sociology*, 1884; Boas, F., "The Central Eskimo," *Bur. Amer. Eth.*, VI:409-669 (1888); Goddard, P. E., "Life and Culture of the Hupa," *U. of Calif. Studies*, I:1-88 (1903), etc.

¹⁹ See, e.g., Curtin, Jeremiah, ed., *Seneca Indian Myths*, 1923; *Creation Myths of Primitive America*, 1899; Boas, F., ed., *Folk Tales of Salishan and Shapitin Tribes*, 1917; Cushing, F. H., *Zuni Folk Tales*, 1901.

²⁰ See Michelson, Truman, "Preliminary Report on the Linguistic Classification of Algonquin Tribes," *Bur. Amer. Ethnol.*, XXVIII:221-308 (1912); Boas, F., ed., *Handbook of American Indian Languages*, 1910.

²¹ For example, Wimberly, L. S., *Folklore in the English and Scotch Ballads*, 1928; Gomme, G. L., *Handbook of Folklore*, 1890; Chamberlain, A. F., *The Child and Childhood in Folk Thought*, 1896; Beckwith, Martha W., *Folklore in America*, 1931.

²² See, e.g., Radin, Paul, *Primitive Man as Philosopher*, 1927.

by long and sympathetic contacts; and even then it is best to ask less and observe more.

The investigation of the overt cultural behavior and institutions is ordinarily a somewhat less difficult matter. Religious ceremonies, fertility rites, rain making, council sessions, popular control, war making, the exercise of public opinion, gossip, black magic, the family and kinship relations, filial duties, the status of women, social and economic classes, methods of property holding, communal rights and duties, festivals, protection of the poor and aged, and scores of other types of behavior may—at least in large measure—be seen and heard. But even in such concrete forms of investigation a large measure of interpretation and inference must be resorted to. Very frequently the native could not answer the investigator's questions if they were asked; they would not be couched within the forms of experience and thinking of the native. He has never looked at these matters from the standpoint of the culture of the investigator. Consequently, the investigator must learn to see these things through native eyes and minds and simplify and reframe his questions from the standpoint of the native cultural background, yet putting that content into his questions which will enable him to translate the native answer into the form and content of his own culture. Frequently, for example, the primitive is much less aware of the fact of social organization than the investigator and is totally unable to schematize or objectify in his thinking or verbal descriptions the social or political or domestic system of his tribe. These things the investigator must infer and piece together from what he sees and hears.²³

The critical organization of the observational processes and procedures is, of course, a matter of great importance for cultural and folk sociology. Since all of the data observed must be interpreted

²³ Often, of course, he draws erroneous inferences, which could be corrected only by longer residence and more skilled observation and interpretation. The primitive man does not know that he has a literature, institutions, traditions, philosophies, or a grammar for his language, etc., in the sense in which we interpret these terms. The investigator must carry these abstract concepts from his own culture and read them into the culture of the primitive. I once watched with great interest an anthropologist make a grammar for a west African language which never before had enjoyed that luxury. He was assisted by a native who spoke the language and looked upon the process of making the grammar with the most evident astonishment and admiration, not to say pride.

and described in terms familiar to the observer and his cultural audience rather than in the forms of interpretation (and often these do not exist) of the observed, the use of analogy is constant and the dangers of misinterpretation are great. This is largely why the early observations of uncritical writers referred to above were so often untrustworthy and ill informed. Prejudice and unfamiliarity played their part in distorting the record, even when there was no intent to deceive. Unfortunately, not many devices for testing and measuring and recording cultural facts from primitive peoples have been devised. The facts are themselves usually too abstract. Phonograph records are now used to secure tonal and verbal accuracy. Physical anthropological measurements have been employed in appropriate situations. Duplicating and triplicating observations, either by the same or different investigators, have been used, but ordinarily it is not possible to secure the check of other studies of the same cultures. The best check yet devised for securing accuracy of observation in cultural investigations is a calm, well balanced and well informed mind, without prepossessions and radical enthusiasms, on the part of the investigator. The use of the photograph, and especially of the moving picture machine, has of course added greatly to technical accuracy of description, but such devices are wholly concrete and do not provide abstract sociological interpretations. Where the observation of archæological data is involved, the task of securing accuracy is much easier. The physical objects can be measured, weighed, photographed, sometimes even be tried out in use, or duplicates for tests may be made. But here again is the problem of inference and sociological interpretation. The cultural sociology of archæology is implicit; it emerges only with the aid of a human mind capable of constructing it in the form of projective thinking.²⁴

Total cultural case analyses of limited population units among more advanced peoples fall into four fairly well defined classes: (1) the local survey, (2) the regional survey, (3) the national survey, and (4) the intensive cultural analysis. The first three types of surveys have usually fallen far short of completeness and they have ordinarily emphasized the economic factors and processes in the

²⁴ See Bernard, L. L., "Invention and Social Progress," *Amer. Jl. Social.*, XXIX:1-33 (July, 1923).

community life more fully than the institutional and sociological.²⁵ John Stow made a fairly adequate survey of this type of the city of London as early as 1598. Near the end of the nineteenth century local surveys began to be made in considerable numbers. Those were based on a careful analysis of available statistical and case materials and on original investigations of various phases of the life of the people, differing in the several surveys according to the chief types of interest. In some cases these surveys extended over a period of years.²⁶ This type of local general survey spread to the rural districts early in this century and for a time had great vogue. In all cases an attempt was made to employ only rigorously tested, and, in so far as possible, quantitative methods of observation. The general local survey is not now so frequently used, because in communities of an advanced culture there are too many types of items that have to be covered to give an adequate picture of the total situation. The regional survey, whether of primitive or of advanced peoples, if it be general or all-inclusive, presents even greater difficulties of this character. As a consequence, regional surveys have been employed primarily for the purpose of blocking out cultural regions in which the same general types of cultural traits and complexes have developed in relation to the physical, historical, and general and special cultural and racial backgrounds.²⁷ This sort of analysis has been of great importance as a basis for setting more detailed investigational problems in cultural and folk sociology and also for giving a cultural picture or map of a national or continental population.²⁸ It is also a valuable aid to intelligent social organization and control. The national cultural surveys have not been numerous, and, like the local and regional, they have usually been heavily weighted in the direction of economic data. The censuses may be said to be highly quantita-

²⁵ See Taylor, C. C., "The Social Survey," *U. of Mo. Bull.*, XX (1919); Eaton, A., and Harrison, S. M., *A Bibliography of Social Surveys*, 1930.

²⁶ See Booth, Ch., *Life and Labor of the People in London*, 18 vols., 1889-1903; Rowntree, B. S., *Poverty: A Study of Town Life*, 1901; Steiner, J. F., *The American Community in Action*, 1928.

²⁷ See, e.g., Campbell, J. C., *The Southern Highlander and His Homeland*, 1921; Randolph, Vance, *The Ozarks: An American Survival of Primitive Society*, 1931; Codrington, R. H., *The Melaneseans*, 2 vols., 1891; Skeat, W. W., and Blagden, C. O., *Pagan Races of the Malay Peninsula*, 2 vols., 1906; Wissler, Clark, *The American Indian*, 1921.

²⁸ For the use of maps in this connection, see Crawford, O. G. S., *Man and His Past*, 1921, Chs. VII-X, XIII.

tive, but not conspicuously accurate, surveys of this general cultural type. In all national surveys the selection of data must be fairly rigorous and the sociological element is likely to receive relatively inadequate treatment.²⁹ All of these national surveys are necessarily relatively abstract, but they are also usually correspondingly quantitative and rigorously controlled in character. The intensive general cultural analysis of modern populations, devoted primarily to the sociological analysis of non-material culture, are relatively recent as examples of scientific investigation in cultural sociology. As less accurate literary efforts they have a much longer history.³⁰ On the scientific level some excellent pieces of cultural analysis have been done in this field.³¹

The special cultural survey, investigating one or more phases of culture, is perhaps now more popular than the general survey. It is applied to local, regional, and national areas. Its major interests are domestic,³² religious,³³ legal,³⁴ administrative,³⁵ industrial,³⁶ educational,³⁷ economic,³⁸ and many more. Here again we find the most carefully controlled methods of observation being used, group and individual tests being made, quantitative data being ascertained and recorded.

Other types of research in cultural sociology must be mentioned

²⁹ This, however, can scarcely be said to be true of Ogburn, *et al.*, *Recent Social Trends*, 2 vols., 1933. For other examples of national surveys, see Graham, H. G., *The Social Life of Scotland in the Eighteenth Century*, 2 vols., 2d ed., 1900; *One Hundred Years' Progress of the United States*, 2 vols., Baltimore, 1876; Rowntree, B. S., *Land and Labour: Lessons from Belgium*, 1910.

³⁰ See Mitford, Mary Russell, *Our Village*, 1832; Lopez, L. V., *La Gran Aldea*, Buenos Aires; also the works of Thackeray, George Eliot, some of the Russian writers, and a similar movement toward intensive local cultural description in recent American literature, perhaps best typified by Sinclair Lewis' *Main Street*. The picaresque novel (e.g., *Gil Blas* and *Tom Jones*) performed much the same functions, exaggeratedly of course, for wider populations in the eighteenth century.

³¹ See Garcia, J. A., *La Ciudad Indiana*, Buenos Aires, 1900, for an example utilizing historical data; Lynd, R. S. and H. M., *Middletown*, 1929; Woofor, T. J. *et al.*, *Black Yoemanry*, 1930; and Redfield, Robert, *Tepoztlan*, 1930, for examples of residence study. *Small Town Stuff*, 1932, by A. Blumenthal, may also be mentioned as an outgrowth of long residence.

³² See Malinowski, B., *Sex and Repression in Savage Society*, 1927; Mead, M., *Growing up in New Guinea*, 1930.

³³ Gill, C. O., *Six Thousand Country Churches*, 1920.

³⁴ See the Johns Hopkins University Studies of Judicial Systems and Administration in various states.

³⁵ Gomme, G. L., *The Village Community*, 1890.

³⁶ Kellogg, P. U., *et al.*, *The Pittsburgh Survey*, 6 vols., 1914.

³⁷ Ayres, L. P., ed., *Cleveland Education Survey*, 25 vols., 1915-16.

³⁸ Thurnwald, R., *Economics in Primitive Communities*, 1932.

briefly. In recent years much interest has been taken in tracing the diffusion of cultural traits from a single source. In this way the spread of the use of tobacco, of the potato, of the arch and the Roman dome, of the alphabet, of the double headed eagle, etc., have been traced.³⁹ Very closely analogous to this method and field of research is that of tracing survivals of primitive cultural traits and complexes into modern life, art, religion, and other forms of social relationship. The literature in this field is already very large,⁴⁰ since the subject itself is very interesting to most people and it has considerable importance for social planning and social control. The study of social organization, social change, invention, cultural accumulation, institutions, and a multitude of social practices, such as art, ritual, games, useful arts and technologies, time computation, numeral systems, etc., have received most careful attention.⁴¹ All of these forms of sociological research make use of the historical-comparative method and they involve field, museum and library study, textual and linguistic analysis, and logical and analogical inference in varying degrees.

III. *Methods of Generalization*

The generalization of data into principles and formulas in cultural sociology is much more difficult than in those branches of sociology which study data drawn largely from a single people or from peoples fairly homogenous in culture. I have pointed out elsewhere⁴² how sociology began its systematic study of social phe-

³⁹ Apperson, G. L., *The Social History of Smoking*, 1914; D'Alviella, G., *The Migration of Symbols*, 1894; Marett, R. R., *The Diffusion of Culture*, 1927; Smith, G. E., *Human History*, 1929; Perry, W. J., *The Growth of Civilization*, 1923; Breasted, J. H., "The Earliest Civilization and Its Transition to Europe," *Sci. Monthly*, X:249-268 (Mar., 1920).

⁴⁰ Tozzer, A. M., *Social Origins and Social Continuities*, 1925; Smith, W. R., *Lectures on the Religion of the Semites*, 1889; Laing, G. J., *Survivals of Roman Religion*, 1931; Lowie, R. H., *Are We Civilized?* 1929.

⁴¹ Rivers, W. H. R., *Social Organization*, 1924; Boas, F., *Primitive Art*, 1927; James, E. O., *Primitive Ritual and Belief*, 1917; Webster, Hutton, *Rest Days*, 1914; Waugh, F. W., *Foods of the Iroquois*, 1916; Ogburn, W. F., *Social Change*, 1922; Chapin, F. S., *Cultural Change*, 1928; Mason, O. T., *The Origins of Invention*, 1895; Hertzler, J. O., *Social Institutions*, 1929; Pitt-Rivers, A. F., *The Evolution of Culture*, 1906.

⁴² "The Development of Methods in Sociology," *Monist*, XXXVIII:292-320 (Apr., 1928).

nomena with an attempt to generalize them on a large scale by taking the data of classical literature, history and mythology⁴³ and followed up this method with the use of historical and anthropogeographic materials⁴⁴ and finally turned to the use of contemporaneous cultural materials drawn mainly from the primitive peoples visited by travellers, missionaries, and anthropologists in the nineteenth century. Vico's great work on the *New Science* may be said to be the first cultural sociology, as indeed it was perhaps the first of all sociologies, if we except Plato's *Republic* and Aristotle's *Politics*, which were attempts at a general social science rather than at sociology specifically. Vico was the first to make a critical examination of a large field of literature (the classical) for the purpose of discovering social laws and principles. There had been collections of the literature of peoples from the earliest historical times for purposes more or less of cultural study, and especially for cultural propaganda.⁴⁵ But only within the last century or two have vast and continuous collections of the folk literature of peoples been made and these have been studied, mainly by the comparative method and by the use of analogical inference for the discovery of folk practices and cultural systems.

Studies of the development of the mythologies⁴⁶ and of the systems of religion⁴⁷ were among the first uses made of this historic material. We have now advanced to the study of social practices, including methods of social organization and social control and the

⁴³ Vico, J. B., *La Scienza Nuova*, 1725.

⁴⁴ Montesquieu, M. de, *L'Esprit des Lois*, 1746, and other works in the field of the philosophy of history.

⁴⁵ The assemblage of the Hebrew writings after the captivity belongs to this type and the *Septuagint* has a similar, but a somewhat more scholarly, purpose. The *Talmud* apparently has served the function of stabilizing Jewish traditions and ethics. The renaissance brought about a similar collection of Latin and Greek authors and the church assembled the writings of its Fathers, but the motive in neither case was particularly sociological; in the former instance it was chiefly literary and philosophical, and in the latter case it was mainly theological. Yet, as we have seen, sociological use was made of these collections. A few more modern examples may be mentioned: Aytoun, W. E., ed., *The Ballads of Scotland*, 1858; Müller, F. M., ed., *The Sacred Books of the East*, 9 vols., 1890; Burton, R., ed., *The Book of the Thousand Nights and One Night*, 17 vols., 1885.

⁴⁶ See, e.g., Frazer, J. G., *The Golden Bough*, 3d ed., 12 vols., 1907-15; Skinner, C. M., *Myths and Legends of Our Own Land*, 2 vols., 1906; Gray, L. H., ed., *Mythology of All Races*, 13 vols., 1916-1932.

⁴⁷ Frazer, J. G., *Folklore in the Old Testament*, 3 vols., 1919; Ginzberg, L., *Legends of the Jews*, 3 vols., 1909-11.

analysis of various social institutions based in part upon the folk literature of the peoples.⁴⁸ Similar studies of languages, at first for philological ends and later for purposes of cultural sociology, have been made.⁴⁹ The methods of investigation used in all of these studies of literatures and languages have been those of collection of the materials, critical textual examination, and historical-comparative analysis and synthesis, together with logical induction and deduction. Such methods of investigation could not well develop to any great degree of perfection before the rise of scientific methods of historical criticism and induction, which were developed especially in the nineteenth century.⁵⁰ The rising critical spirit in historical studies had thrown the old methods of generalization used by the philosophers of history into disrepute and had questioned the validity and adequacy of many of their data. The result was that the sociologists turned largely to contemporaneous cultural data as material for generalization. Between 1872 and 1890, roughly speaking, sociology in all countries was chiefly cultural sociology.

Spencer, Letourneau, Tylor, Morgan, Waitz, and Lippert were among the abler and more productive of the many users of the so-called ethnological or cultural data of this period. They endeavored, although not always successfully, to make their generalizations as inductive as possible. In fact, Spencer was one of the chief exponents of inductive method in social science in the nineteenth century and made strenuous efforts to render his own studies in cultural sociology as strictly inductive as his data would permit.⁵¹ He went to great expense to collect large bodies of data from many sources which he later published in several large volumes⁵² and which he utilized by an ingenuous device⁵³ as a basis for his inductive generalizations. He has been accused of using the

⁴⁸ See, e.g., Hobbhouse, L. T., *Morals in Evolution*, 1915; Westermarck, E., *The Origin and Development of the Moral Ideas*, 2 vols., 1906; *The History of Human Marriage*, 3 vols., 1921; Howard, G. E., *A History of Matrimonial Institutions*, 3 vols., 1904.

⁴⁹ See Müller, F. M., *Lectures on the Science of Language*, 2 vols., 1861-4; Whitney, W. G., *The Life and Growth of Language*, 1875; Sapir, E., *Language*, 1921; Powell, J. W., "Indian Linguistic Families of America North of Mexico," *Bur. Amer. Ethnol.*, VII:1-142 (1891).

⁵⁰ See Small, A. W., *The Origins of Sociology*, 1924; Bernheim, Ernst, *Lehrbuch der historischen Methode und der Geschichtsphilosophie*, 1889.

⁵¹ Bernard, L. L., "Herbert Spencer: the Man and His Age," *So. Atlantic Quart.*, July, 1923.

⁵² Spencer, H., *Descriptive Sociology*, 1873 and after.

⁵³ Spencer, H., *Autobiography*, 1904, II:325-6.

speculative or deductive method instead, and doubtless he did frequently depart from a rigorous employment of inductive generalization, especially where his data were—as was frequently the case—either too limited or not sufficiently applicable to the problem in hand. He, like many another generalizer, created his data imaginatively or hypothetically⁵⁴ when he could not draw them directly from experience and observation. The urge for completeness in the generalizing scientist is likely to be stronger than the urge for the critical testing of data, which is frequently so strong in the trained investigator. Nearly all of the early cultural sociologists were generalizers rather than collectors of data, certainly rather than field workers. They drew their data from the four winds of travel, tradition, missionary writings, and personal reminiscence. Although they were perhaps more strongly imbued with the ideal of inductive generalization of their data than most men—else why should they have ransacked the globe for their basic facts—their data had certain great defects. They were not always trustworthy. They were drawn from a confusing variety of situations and peoples. A fact about marriage or a food taboo under one set of conditions or environment, for example, might have an entirely different significance from what it had in another social or natural environment, and yet these data were treated as legitimately comparable. These students had no adequate method of weighting or synchronizing or otherwise reducing their data to a common denominator. They paid little attention to the incidence of environment, but treated their data and their conclusions ideologically, as if they had found them in a physical, intellectual or emotional vacuum. They possessed no adequate theory of a sample or of handling a sample. And, above all, they very frequently generalized from a single practice, or from a single people, or from no authentic case at all. Thus we have the conclusions by Bachofen,⁵⁵ McLennan,⁵⁶ and Morgan⁵⁷ regarding universal primitive promiscuity, matriarchy, kinship systems, and fixed cultural stages. The methods of generalization used were at best informal statistical, and quite frequently they were generalizations by logical analogy

⁵⁴ See Ch. I, Part II.

⁵⁵ Bachofen, J. J., *Das Mutterrecht*, 1861.

⁵⁶ McLennan, J. F., *Primitive Marriage*, 1865; *Studies in Ancient History*, 1876; *The Patriarchal Theory*, 1885.

⁵⁷ Morgan, L. H., *Systems of Consanguinity*, 1869; *Ancient Society*, 1877.

from cases with a general appearance of similarity to modern cases, but not necessarily with the same meaning. This method has often been called the historical-comparative, since it involves at once the use of historical data and the comparison or assimilation to a common norm of a large number of data—contemporaneous or historical—from a vast number of sources. Sometimes the method has been termed simply comparative, but in any case its bases were reasoning by analogy and informal statistical induction.

The comparative method is still used, as is evidenced by such works as those of Westermarck,⁵⁸ Frazer,⁵⁹ Sumner and Keller⁶⁰ and Briffault.⁶¹ But around the eighteen-nineties there arose the same sort of criticism of the comparative method of cultural generalization as had earlier disturbed the philosophers of history in their use of historical generalization. F. W. Putnam, J. W. Powell, and others were the earlier exponents of another or substitute method. Both Putnam and Powell were the means of building up great museum collections of archæological and ethnographical materials, the one at Harvard and New York and the other in Washington. Putnam especially gave a strong impulse to distrust all cultural generalization beyond the limits of a close study of a single tribe or people. This distrust of cultural generalization has perhaps been best stated by Lowie,⁶² who, incidentally, is one of the most persistent and inveterate generalizers in the field—and by means of the older methods. The archæological field work stimulated by Powell and Putnam soon began to bear fruit in long series of ethnographic memoirs, especially on the American Indians, published largely in the reports of the Bureau of American Ethnology. The data thus accumulated in a scientific manner and carefully tested and defined have been classified and are now in process of useful generalization.⁶³ Similar generalizations have been made on the basis of data from the contemporary culture of

⁵⁸ *Op. cit.*

⁵⁹ *Op. cit.*

⁶⁰ *The Science of Society*, 4 vols., 1927; also Sumner's *Folkways*, 1906.

⁶¹ *The Mothers*, 3 vols., 1927.

⁶² Lowie, R. H., *Primitive Society*, 1920.

⁶³ See, as types of such generalization, Goddard, P. E., *Indians of the Southwest*, 1913; *Indians of the Northwest Coast*, 1924; Wissler, C., *Indians of the Plains*, 1921; Stites, E., *Economics of the Iroquois*, 1907; Thomas, N. W., *The Nations of Australia*, 1908.

modern peoples.⁶⁴ The cultural generalizations regarding the more advanced peoples are so numerous that a list of them would fill an ordinary volume. Frequently these generalizations have been given a high degree of dependability because of the relative homogeneity of the data involved and of the possibility of using quantitative and test data.

The attempt to make use of statistical methods of generalization of cultural data from primitive peoples has not as yet met with a great degree of success. The most ambitious attempt in this direction is that of Hobhouse, Wheeler and Ginsberg.⁶⁵ They have made an elaborate attempt to apply statistical methods to the establishment of cultural stages among primitive peoples and to the correlation of these and other social phenomena with types of economic culture, governmental forms, methods of administering justice, family forms, war, class, and property structure. They say, as a result of their experience, that statistical methods can be used in dealing with such phenomena only with reservations, but that the rough results obtained are valuable, especially in checking generalizations of a less critical sort already in use.⁶⁶ T. E. Jones and F. E. Clements⁶⁷ have also attempted to study the phenomena of diffusion—the one among Japanese mountaineers and the other among the Polynesians—by means of statistical methods. Their results showed certain expected correlations, especially between conservatism and isolation and radicalism and a variety of social contacts. It can scarcely be said as yet, however, that the few formal statistical studies of primitive cultures so far made have done more than confirm the informal statistical observations already in use. Undoubtedly the use of statistics in generalizing from primitive cultural data will increase and yield more positive results as better methods of testing, defining and standardizing these data are worked out so as to render them available for statistical manipulation. Already such standardization of data from

⁶⁴ See, e.g., *Recent Social Trends*; Stearns, H. E., ed., *Civilization in the United States*, 1922; Beard, C. A., et al., *The Rise of American Civilization*, 2 vols., 1927; *The American Leviathan*, 1930; *Toward Civilization*, 1930; Dorsey, G. A., *Man's Own Show: Civilization*, 1931; Ingenieros, José, *Sociología Argentina*, 1901; *La Evolución de las Ideas Argentinas*, 2 vols., 1918, 1920; Ross, E. A., *Changing America*, 1912.

⁶⁵ See bibliography.

⁶⁶ *Op. cit.*, 7.

⁶⁷ See bibliography.

the more advanced societies has been accomplished in such fields as politics, fashion, religion, ceremonials, public opinion, advertising, propaganda, war, newspaper circulation, education, and many other types of behavior in modern societies.⁶⁸ Plotting data on a map has also proved to be a concrete and effective method of generalizing cultural data, especially with reference to diffusion, cultural succession, cultural conflict, and cultural assimilation.⁶⁹ Since culture has so many demographic, geographic and ecological aspects, the generalization of its data by means of maps, graphs and charts is usually feasible.⁷⁰

BIBLIOGRAPHY

- Beckwith, Martha W., *Folklore in America, Its Scope and Method*, 1931.
 Clements, F. E., "Quantitative Methods in Ethnography," *Amer. Anthropol.*, XXX:295-310 (1928).
 Clements, F. E., Schenck, S. M., and Brown, T. K., "A New Objective Method for Showing Special Relationships," *ibid.*, XXVIII:585-604
 Cox, G. W., *An Introduction to the Science of Comparative Mythology and Folklore*, 1881.
 Crawford, O. G. S., *Man and His Past*, 1921, Chs. III, VII-X, XIII.
 Driver, H. E., and Kroeber, A. L., "Quantitative Expression of Cultural Relationships," *Univ. Calif. Pub. Amer. Archeol. and Ethnol.*, XXXI:211-256 (1932).
 Farnell, L. R., *The Value and Methods of Mythologic Study*, 1919.
 Gomme, G. L., *Mythology as a Historical Science*, 1908.
 Graebner, F., *Methode der Ethnologie*, Heidelberg, 1911.
 Herskovits, M. J., "Methods of Prehistoric Chronology," *Trans. Ill. Acad. Sci.*, XXII:72-78 (Apr., 1930).
 Hobbouse, L. T., Wheeler, G. C., and Ginsberg, M., *The Material Culture and Social Institutions of the Simpler Peoples*, 1915.
 Jackson, J. W., *Shells as Evidence of the Migration of Culture*, 1917.
 Jones, T. E., *Mountain Folk of Japan*, 1926.
 Krappe, A. H., *The Science of Folklore*, 1930.
 Krohn, Kaarle, *Die folkloristische Arbeitsmethode*, Oslo, 1926.
 Murdock, G. P., "The Science of Culture," *Amer. Anthropol.*, XXXIV: 200-215 (Apr.-June, 1932).

⁶⁸ See, e.g., Rice, S. A., *Quantitative Methods in Politics*, 1928; Chapin, F. S., "Growth Curves of Institutions," *Sci. Mo.*, XXIX:79-82 (July, 1929); "A Theory of Synchronous Culture Cycles," *Jl. Soc. Forces*, III:596-604 (May, 1925).

⁶⁹ See Crawford, O. G. S., *op. cit.*

⁷⁰ Bernard, L. L., "Interdependence of Factors Basic to the Evolution of Culture," *Amer. Jl. Sociol.*, XXXII:177-205 (Sept., 1926).

- Murphy, G. and L. B., *Experimental Social Psychology*, 1931, pp. 25-33.
- Nikolsky, Vladimir, "De la Méthode en Préhistoire," *L'Anthropologie*, XL:1-17 (Jan., 1930).
- Perret, Auguste, "Le Musée moderne," *Museum*, III:225-235 (Dec., 1930).
- Rice, S. A., ed., *Methods in Social Science*, 1931, pp. 248-350.
- Saintyves, P., "Les Origines de la Méthode comparative et la Naissance du Folklore," *Rev. de l'Hist. d. Relig.*, CV:44-70 (Jan.-Feb., 1932).
- Sternberg, L. J., "Die Ethnologie der Gegenwart. Neueste Fortschritte, wissenschaftliche Strömungen und Methoden," *Ethnol. Studien*, I:215-258 (1931).
- Tylor, E. B., "On a Statistical Method of Investigating Social Institutions," Kroeber and Waterman, *Source Book for Anthropology*, 1920.



CHAPTER IX

SOCIAL PSYCHOLOGY

ALTHOUGH it is now a truism that from the point of view of logic scientific method is identical for all the sciences,¹ in the concrete process of science building methods vary according to the types of data and problems involved. Thus the social sciences use methods different from those of the physical sciences, and even within the general field of sociology itself sources and methods may differ as among the various subdivisions. In this chapter we shall deal with three groups of problems as they relate to the special field of social psychology, namely, with the problem of sources of data, with that of the methods of making these data available, and with the methods of generalizing these data once they have been made available.

I. *Sources of Data*

Since social psychology studies individual and collective social adjustment behavior, its sources, as one would naturally expect, are numerous, diverse, and varied. The following list of some of the types of sources—they are not mutually exclusive—which have been used by social psychologists will give some idea of the many reservoirs that have been or can be tapped: historical and anthropological or cultural data, observational data of travellers or foreign commentators, statistical records, newspapers, magazines, books, and other literary precipitates of behavior, the data of abnormal behavior manifestations including clinical data, personal documents, non-

¹ For an early statement of this position, see Bernard, L. L., "The Conditions of Social Progress," *Amer. Jl. Sociol.*, XXVIII:21-48 (Jul., 1922), especially pp. 44-45; "Scientific Method and Social Progress," *Amer. Jl. Sociol.*, XXXI:1-18 (Jul., 1925), especially pp. 9-10. For more recent and detailed elaborations of this viewpoint see Lundberg, G. A., *Social Research*, 1929, Chs. I, IV; Lundberg, Anderson, and Bain (eds.), *Trends in American Sociology*, 1929, Ch. X; Bain, Read, "The Concept of Complexity in Sociology," *Soc. Forces*, VIII:222-32 (Dec., 1929), 369-78 (Mar., 1930).

controlled observational data, and controlled observational data.²

Historical and anthropological data have been used most extensively by the so-called "planes and currents"³ school of social psychology. The reason is not far to seek. Dealing as it does with the more generalized aspects of behavior it must necessarily go beyond the limits of any one culture or period for sufficient data to generalize. The phenomena which this school studies, furthermore, are frequently difficult to observe in one's own age and culture; they usually require the perspective of distance either in time or in culture to make them clear or even perceptible. Again, our own conventions, traditions, myths, etc., are usually hemmed in with popular sanctions which forbid the ruthless and often destructive analysis of science; and vested interests—economic, political, religious—stand firmly back of these sanctions. Finally, it is easier to divest ourselves of our prejudices when studying the social behavior of other peoples or ages than when studying similar behavior at home.⁴ Fewer conflicts are aroused. For these reasons historical and anthropological data have been freely drawn upon. One might even go so far as to say that it was the accumulation of cultural-historical data during the last century that stimulated the creation of social or "folk" psychology, as it was then called.⁵ Among the important writers who have used these types of data we might cite Lazarus, Steinthal, Wundt, and Vierkandt in Germany; Tarde, LeBon, and the Durkheim school in France; and Sumner, Boas, and Ross in the United States. Recent examples, to mention only two almost at random, are Odegard's *Pressure Politics* (1928) using historical

² Not all of these sources are equally valuable for all types of problems. In actual practice, however, it is not the problem which determines the sources but the other way around. That is, the data themselves give rise to the problems. There is a common psychological denominator in all the social sciences, since they all deal with human behavior, and therefore all may be said to offer source material for social psychology. This fact, namely, that social psychology is in process of being integrated out of so many other disciplines, accounts in part for the great diversity of its sources. At present, instead of a single integrated social psychology we have many converging social psychologies cultivated by anthropologists, sociologists, psychologists, political scientists, historians, and economists.

³ "Planes" refer to the uniformities of behavior throughout a group or culture, such as customs, traditions, beliefs, folkways, mores, etc. "Currents" refer to processes or movements such as imitation resulting in fashions, crazes, fads, etc. See Ross, E. A., *Social Psychology*, 1908, p. 1.

⁴ Bernard, L. L., "The Development of Methods in Sociology," *Monist*, XXXVIII:292-320 (Apr., 1928).

⁵ See Karpf, Fay, *American Social Psychology*, 1932, 47-48, for an excellent summary of the viewpoint of the founders of "folk" psychology in Germany in 1860.

data, and Lévy-Bruhl's *How Natives Think* (1925) using anthropological data.

The extension of the use of cultural data to the study of personality as well as of planes and currents is illustrated by the work of Malinowski and Miss Mead who have employed them in analyzing the behavior of individuals. An interesting, if somewhat tangential, use of such data in recent years has been that of the psychoanalysts in attempting to demonstrate the universality of their generalizations.⁶

Social psychology will probably never be able to dispense wholly with historical and anthropological data no matter how far it develops in the direction of experimentation. Contemporary studies tell us only how our contemporaries react. They do not necessarily tell us how our ancestors behaved nor how our preliterate neighbors behave. Familiarity with cultural data is advisable for all students of social psychology whether they mean to work in this field or not. It will serve as a wholesome check upon their generalizations.

The observational data of travellers or foreign commentators—when they deal with people rather than with scenery—are valuable sources because the traveller or outsider is more likely to notice peculiarities in a foreign culture than is a person who is immersed in it. Customs stare him in the face. Thus books of travel, from Herodotus to Ross, including those of Arthur Young and Alexis DeTocqueville, furnish a wealth of source material for the social psychologist, not only because they reveal types of collective behavior patterns that would otherwise be lost, but also because they reveal the psychology of the stranger, that is, of a person outside of his own cultural matrix. In this latter sense they may be said to constitute personal documents. W. D. Wallis has used this type of source in studying currents of behavior patterns.⁷

There has never, perhaps, been a more ardent advocate of the use of statistical data in social psychology than Gabriel Tarde, to whom

⁶ Malinowski, B., *Crime and Custom in Savage Society*, 1926; *Sex and Repression in Savage Society*, 1927; Mead, Margaret, *The Coming of Age in Samoa*, 1928; *Growing Up in New Guinea*, 1930; and "The Rôle of the Individual in Samoan Culture," *Jl. Royal Anth. Inst.*, LVIII:481-95 (1928); Freud, S., *Totem and Tabu*, 1918.

⁷ *Culture and Progress*, 1930, Ch. IV. Wallis speaks of the diffusion of culture traits, but this is essentially what Tarde meant by imitation.

economic, political, and religious statistics were the indices of imitative behavior in the field of desires and beliefs.⁸ But in spite of his early sponsoring of such data for social psychology it has been only recently that they have been actually used for this purpose. Among the important studies employing statistical data are those of Rice and Ogburn on political attitudes and opinion and of Lundberg on conservatism and radicalism, all based upon election statistics.⁹

The resourceful social psychologist finds a wealth of data in such depositories of psycho-social content as newspapers, magazines, stories, advertisements, etc. As an illustration of the use of such sources we may cite the study of French nationalism by Hayes. They may also be used in the study of trends in intellectual fashions as has been done by Becker and Hart, or of fashions in dress as was done by Kroeber. Park has found the immigrant press a fertile source for the study of the psychology of cultural readjustment. Fenton and Holmes have studied the influence of newspaper stimuli as factors in suggesting criminal behavior. Young has employed hymns as sources, and Lasswell has used documents in his brilliant study of propaganda technique in the world war.¹⁰

Abnormal behavior has furnished source material for social psychology almost from its inception. Especially stimulating in the early days were the data on suggestion and hysteria, then being explored by Bernheim, Charcot, and Janet. More recently psychiatry, including psychoanalysis, has furnished valuable source data

⁸ *The Laws of Imitation*, tr. by Elsie Clews Parsons, 1903, Ch. IV.

⁹ Rice, S. A., *Quantitative Methods in Politics*, 1928; Ogburn, W. F., and Peterson, D., "Political Thought of Social Classes," *Pol. Sci. Quart.*, XXXI:300-17 (June, 1916); Ogburn, W. F., and Goltra, Inez, "How Women Vote," *Pol. Sci. Quart.*, XXXIV:413-33 (Sept., 1919); Lundberg, G. A., "The Demographic and Economic Basis of Political Radicalism and Conservatism," *Amer. J. Sociol.*, XXXII:719-32 (Mar., 1927).

¹⁰ Hayes, C. J. H., *France a Nation of Patriots*, 1930; Becker, H., "Distribution of Space in the American Journal of Sociology, 1895-1927," *Amer. J. Sociol.*, XXXVI:461-66 (Nov., 1930); Hart, H., "Changing Social Attitudes and Interests," in *Recent Social Trends*, 1933, II:382-443; Kroeber, A. L., "On the Principle of Order in Civilization as Exemplified by Changes of Fashion," *Amer. Anthropologist* (N. S.), XXI:235-63 (Jul.-Sept., 1919); Park, R. E., *The Immigrant Press and Its Control*, 1922; Fenton, Frances, "The Influence of Newspaper Presentations Upon the Growth of Crime and Other Anti-Social Activity," *Amer. J. Sociol.*, XVI:342-71, 538-64 (1910-1911); Holmes, J. L., *Crime and the Press*, 1929; Young, K., "The Psychology of Hymns," *Jl. Abnormal and Soc. Psych.*, XX:391-406 (Jan., 1926); Lasswell, H. D., *Propaganda Technique in the World War*, 1927. Social psychologists probably draw on this type of source more than they are aware.

for the study of normal behavior, for as Comte pointed out,¹¹ the pathological case serves as a form of experiment in which normal phenomena are exaggerated or magnified as under a powerful lens. An important monograph in this field is T. K. Oesterreich's study of demoniacal and spirit possession among preliterate and cultural peoples.¹²

Personal documents have been widely exploited by the Chicago school of social psychologists in the United States and by the students of William Stern and Charlotte Bühler in Germany, as well as by Russian psychologists.¹³ They include diaries, confessionals, autobiographies, letters, clinical or social case work records, descriptions of personal experiences such as conversions, love affairs, quarrels, conflicts, etc.¹⁴ For the most part these documents have been used in the study of personality organization or disorganization, as in the classical study by Thomas and Znaniecki on the Polish peasant and Dr. Cavan's study of suicide.¹⁵ They are in this sense primary data of a very vital sort. They may also serve as secondary sources. Thrasher, for example, has found that by the use of such documents he can secure data on neighborhood mores, beliefs, etc., which would forever remain hidden from outside observers.¹⁶

The sources so far listed refer to data already extant when the researcher begins to work. In addition to such documentary sources, however, the social psychologist must frequently find new data for the solution of his problem. These new data may be the result of either controlled or non-controlled observation, but since they are so closely bound up with the methods used in securing them we shall deal with them under the problem of methods.

This brief survey of the sources available for social psychology will indicate how varied and diverse they are. Indeed, it might be

¹¹ *Positive Philosophy* (Martineau tr.), 1853, II:100.

¹² *Possession Demoniacal and Other among Primitive Races, in Antiquity, the Middle Ages, and Modern Times*, 1930. This study also illustrates the use of anthropological and historical data.

¹³ Murphy, G. and L. B., *Experimental Social Psychology*, 1931, 571.

¹⁴ See Krueger, E. T., "Personality and Life History Documents," *Pub. Amer. Sociol. Soc.*, XIX:176-80 (1925).

¹⁵ Thomas, W. I., and Znaniecki, F., *The Polish Peasant in Europe and America* (2nd ed.), 1927; Cavan, Ruth S., *Suicide*, 1928. Psychologists sometimes refer to the life-history method as the genetic method since it attempts to get at the genesis of personality. This does not necessarily mean genetic in the biological sense, however.

¹⁶ "Social Attitudes of Superior Boys in an Interstitial Community," in Young, K. (ed.), *Social Attitudes*, 1931, 236-64.

said that the sources for social psychology are limited only by the ingenuity, inventiveness, and resourcefulness of the researcher himself.

II. Methods of Making Sources Available

Scientific data, however, do not exist free in nature ready to be plucked by the scientist. In a certain sense every science "manufactures" its data. That is, it takes the raw material of life or nature and puts it through a system of "processing" in order to make it available for use in solving its problems. Research consists in large part of the conversion of sources into scientific facts. It is not a mechanical procedure, however, and cannot be reduced to a simple routine. Every research project is as much a unique and even a personal creation as is a scientific invention or an artistic production.¹⁷ Nevertheless the example of others can usually be helpful.

The method to use in getting at sources will depend upon the nature of the sources themselves. Ultimately all methods reduce to two, namely, to non-controlled observation and controlled observation, but if the data exist in the form of records or documents we may speak of the method of making them available as the library or documentary or historical method. The student who attempts to use this method will have to read extensively in his own field, trace numerous references, and make extended excursions into related fields.¹⁸ The most important faculty he must cultivate is the ability to recognize a pertinent fact when he sees it.¹⁹ He must, for example, be able to perceive a craze even when it is not so labelled by the author, for from his vantage point he will be able to see the psychological implications and bearings of facts when the compiler or collector himself could not. In general, the use of the historical method in social psychology does not differ from its use in other fields and the student would do well to look into some

¹⁷ Bernard, L. L., "Research and the Exceptional Man," *Pub. Amer. Sociol. Soc.*, XXVII:3-19 (May, 1933).

¹⁸ He should, of course, be well acquainted with the numerous bibliographical and reference tools available for such work. On the mechanical side he should also have a well organized system of note taking and filing. The Chicago school has worked out a rather elaborate system, involving different colored filing cards for different types of notes, but the ingenious student can develop an efficient system for himself.

¹⁹ Students of Professor Faris will recognize the source of this statement.

of the techniques developed by historians for testing their data.²⁰ There is, however, one important difference in the use of this method in social psychology and in other fields. To the social psychologist it is not of such primary importance whether or not a document is "true," or even sincere, since the motives of the author are frequently as much data to him as are the contents of the sources themselves.¹⁴

The use of pre-existing documentary sources requires, perhaps more even than the laboratory method, a "capacious and well filled mind" ¹⁷ to begin with. Without this the researcher will overlook many facts or render them sterile by lack of imagination in relating them to other facts. At its best, and in the hands of competent men, the library method gives results for social psychology quite unexcelled, because it can cover such a wide range of viewpoints and phenomena. For this very reason, however, at its worst, it may degenerate into a mere search for cases to illustrate a preconception.

So far we have been dealing with methods which depend upon pre-existing sources.²¹ We come now to the problem of creating new data. This may be done either by the method of non-controlled observation or by that of controlled observation. By non-controlled observation we do not mean uncontrolled in the sense of irresponsible observation, nor is there anything invidious implied by the term. As compared with controlled observation it is characterized by (1) the absence of mechanical tests or aids to accuracy, such as rulers, scales, tests, etc., (2) the lack of standardization in the conditions of observation or in the units of observation, and (3) the lack of any attempt to secure a random sample or to correct for sampling errors. In non-controlled observation we have to take whatever data are presented in whatever form they are presented regardless of whether they are in a form to apply to our problem. Illustrations of non-controlled observation as used in social psychology are, the interview when the interviewer uses no schedule

²⁰ A good manual to consult is Langlois, C. V., and Seignobos, C., *Introduction to the Study of History*, tr. by G. G. Berry, 1898.

²¹ When personal documents do not already exist, considerable finesse and tact must be used in getting people to write them. Thrasher in the paper cited describes the methods he has used in securing such documents and Krueger has discussed the same problem. See "The Technique of Securing Life History Documents," *Jl. App'd Sociol.*, IX:290-98 (Mar.-Apr., 1925).

or questionnaire to guide him, "participant observation" of group behavior, sympathetic introspection, and verbal descriptions of behavior as observed in real life situations, such as descriptions of lynchings, camp meetings, football crowds, families, play groups, etc., when no instruments such as stop watches or other mechanical devices are used to check accuracy.²²

Much of what has been written about the social behavior of individuals and groups by men like Shakespeare, Goethe, Dante, or Emerson—or, indeed, by anyone who has lived long enough to acquire wisdom—and especially the contents of folk literature, are the result of non-controlled observation. Folk wisdom about human nature²³ may or may not be true. Neither the insights of genius nor those of the folk may legitimately be said to constitute a science of social psychology. Any third or fourth rate mind may challenge them as long as they remain in the realm of non-controlled observation, and this is all the more probable in social psychology because everyone feels that he knows human nature.

Münsterberg, among others, taught us long ago how many pitfalls there are in the way of non-controlled observation, and more recently Dr. Dorothy Thomas and her associates have shown how even rigorously trained observers reporting on the minutiae of adult social behavior do not always produce thoroughly reliable results. There is, furthermore, always the danger that, in spite of ourselves, we may allow our own conflicts and prejudices and wishes to influence what we observe.²⁴ The numerous conflicting reports which travellers bring back from Russia illustrate some of these difficulties.

In addition, there is the danger that non-controlled observation is likely to give us the feeling that we know more than we actually do about what we have seen. The data are so real and vivid and therefore our feelings about them are so strong that we sometimes

²² It will be noted that many of the sources listed in the first part of this chapter were originally secured by the method of non-controlled observation and this must always be borne in mind in evaluating them for scientific use.

²³ "Pride goeth before a fall," "He travels fastest who travels alone," "A soft answer turneth away wrath," "Money makes the mare go," "Sour grapes," "Black sheep," etc.

²⁴ Münsterberg, H., *On the Witness Stand*, 1908; Thomas, Dorothy, "An Attempt to Develop Precise Measurements in the Social Behavior Field," *Sociologist*, VIII:436-56 (Dec., 1932); Ogburn, W. F., "Bias, Psychoanalysis and the Subjective in Relation to the Social Sciences," *Pub. Amer. Sociol. Soc.*, XVII:62-74 (1923).

tend to mistake the strength of our emotions for extensiveness of knowledge. While reading a case history, for example, we get the feeling that we are learning a great deal about human nature. But after we have finished and the emotional spell breaks, we find that all the concrete, objective knowledge we have gained might be stated in a single sentence. Our personalities have been enriched by the experience but we must be on our guard lest we deceive ourselves into thinking that the science of social psychology has been correspondingly enriched.

In spite of all these difficulties, however, valuable contributions have been made by the method of non-controlled observation. The studies made by Baldwin and Cooley on the social development of children and by Bryce and Siegfried²⁶ on American psychology are illustrations, not to mention the numerous studies based on documents of non-controlled observational data already referred to in the first part of this chapter.

The present trend, however, is toward the increasing use of controlled observation. The degree of control depends largely upon the instruments used. These may vary from such devices as questionnaires, schedules, or attitude scales, to elaborate laboratory set-ups involving complicated apparatus.²⁶ Controlled observation may take place inside or outside of a laboratory. The only prerequisite is that wherever it is made the person who is making it must use instruments which will render it subject to checking by others.²⁷

²⁶ Baldwin, J. M., *Mental Development in the Child and the Race*, 1896; Cooley, C. H., *Human Nature and the Social Order*, 1902; Bryce, J., *The American Commonwealth*, 1889, Vol. II, Parts IV-VI; Siegfried, A., *America Comes of Age*, 1927.

²⁸ See Lundberg, *op. cit.*, 32-33. Control devices may apply to the observer (watches, scales, etc.), to the conditions of observation (laboratory set-ups), or to the phenomena observed (sampling techniques), or to any or all combinations of these factors.

²⁷ The problem of checking in social psychology raises some peculiar difficulties. For example, in personality measurement, when a second testing gives results different from those secured the first time, it is difficult to decide whether these differences are traceable to defects in the instrument used or to actual changes in the phenomena observed. Psychologists, approaching the problem with their professional bias toward belief in a fixed, inherent personality, have tended to interpret inconsistent results as due to defects in the instrument (such that, for instance, it does not sample the proper responses). This has led to the concept of reliability, one of the most important criteria used in evaluating testing instruments, and to statistical techniques for measuring it. Bain, however, has found an astonishing amount of inconsistency in replies to a second use of a questionnaire even in such matters of fact as dates. See "Stability in Questionnaire Response," *Amer. J. Sociol.*, XXXVII:445-53 (Nov., 1931).

The types of problems in social psychology which can be adequately studied in a laboratory are limited since the very nature of a laboratory situation tends to distort the social problem studied. Nevertheless, important contributions have been made in laboratories, especially in the fields of motivation and of child study. Thus the relative efficacy of different incentives (punishment or reward, encouragement or discouragement, equal or unequal remuneration, individual or group rewards, etc.); the influence of conditions of work (razzing, presence of co-workers or observers, etc.) on output; the strength and communicability of emotions; the factors in suggestibility; facial expression as a form of communication; the social behavior of children; and similar problems have all been studied effectively in the laboratory.²⁸

But many social psychologists feel that the results secured from laboratory observation of adults, while accurate and trustworthy for the situation in which they were obtained, are not normal nor extensive enough to serve as a basis for a comprehensive social psychology. This has led to the invention of numerous devices for the controlled observation of social behavior as it occurs in real life situations. Thus, for example, the diary becomes the "controlled diary,"²⁹ in which one reports stated emotions and activities at stated intervals. The interview situation also develops numerous control devices.³⁰ The personal document is followed up with a questionnaire in which omissions are made good.³¹ The Baldwin-Cooley type of child observation makes way for modern methods in which the observer remains outside of the situation, timing his observations to the second, tracing all movements and reactions, following strict sampling procedure, yet in no way interfering with the naturalness of the situation he observes.³² And, finally, numerous scales and tests of personality take the place of sympathetic introspection or insight or common sense.

Since the problem of controlled observation outside of the laboratory is so closely bound up with the use of these instruments, and

²⁸ The concrete methods used in these laboratory studies are described in detail in Allport, F. H., *Social Psychology*, 1924, and in Murphy, *op. cit.*

²⁹ Murphy, *op. cit.*, 572.

³⁰ See Lundberg, *op. cit.*, Ch. VII, for a discussion of controls in interviewing.

³¹ Thrasher, in the article cited, 240-41. See also Krueger, *Jl. App'd Sociol.*, IX:290-98 (Mar.-Apr., 1925).

³² These methods are summarized in Murphy, *op. cit.*, Ch. V, and in Thomas, W. I. and D. S., *The Child in America*, 1928.

since one cannot understand present trends in research in social psychology without some knowledge of their nature, we may say a few words about them here. Most of them, by analogy with intelligence tests, are pencil and paper tests.⁸³ Although they assume an almost bewildering number of concrete forms, we may generalize their common characteristics as follows. They all present to the individual a set of standardized stimuli, usually in verbal form. These may consist of statements of attitude, of questions requiring a yes or no answer, of a series of alternative solutions to a problem requiring a choice to be checked, or of some other type of verbal or symbolic stimuli. The person studied is required to make one or more responses within the limits presented by the test and no other, since each response must be evaluated on the basis of a stan-

⁸³ In the field of physiological psychology the establishment of laboratories during the last two decades of the nineteenth century stimulated the invention of numerous devices for the measurement of the sensory and internal behavior of individuals. But it was not until well along into the twentieth century that similar instruments for the measurement of mental, moral, and social aspects of personality came into widespread use. Terman, one of the leaders in this latter movement, states that his own lack of facility in the use of conventional laboratory apparatus in psychology was one of the motives that led him to work in the field of the newer types of tests (Carl Murchison, ed., *Autobiographical History of Psychology*, 1932, II:311). In 1904 Thorndike published his *Introduction to the Theory of Mental and Social Measurements*, in which he dealt with the fundamentals involved in measurement. In 1905 Binet and Simon published their famous scale for the measurement of general intelligence. This was popularized in the United States during the next decade through various translations and adaptations (by Goddard in 1911, Kuhlmann in 1912, Terman in 1914, and later, in 1922, by Herring) the most famous being the Stanford Revision by Terman. The war greatly stimulated the use of these tests and in 1917 Rudolf Pintner ("A Mental Survey of the School Population of a Village," *School and Society*, V:597-600, May 19, 1917) and in 1918 O. S. Otis ("An Absolute Point Scale for the Group Measurement of Intelligence," *Jl. Educa. Psych.*, IX:239-61, Mar., 1918, 333-48, June, 1918) published work on group intelligence tests. It was quite natural, therefore, that the same methods should be pushed into other fields of personality. At first they were extended to the study of vocational aptitudes and abilities and a whole new field of industrial psychology arose. (Münsterberg summarizes what had been done in this field up to 1913 in his *Psychology and Industrial Efficiency*.) It was only a step from the vocational aspects of personality to the peculiarly social ones, and during the 1920's so many measuring devices for the study of the social aspects of personality appeared that in 1932 Goodwin B. Watson was able to say that there was no trait of personality which could not now be measured by existing techniques ("Character Tests and Their Applications through 1930," *Rev. Educa. Research*, II:238-46, June, 1932). The earlier attempts at measurement relied largely on ratings of individuals by themselves or by competent judges. This procedure was severely criticized by Rugg ("Is the Rating of Human Character Practicable?" *Jl. Educa. Psych.*, XII:425-38, 485-501, XIII:30-42, 81-93) and fell into disrepute, although it was revived in modified form by Hartshorne and May in the late twenties and it is still frequently relied upon as a method of validating tests. Ranking individuals with reference to specific traits was another early measuring technique.

dard. Thus both the stimuli and the responses are as rigorously controlled as possible.³⁴ Hartshorne and May attempted to get away from the pencil and paper techniques by setting up controlled situations in real life—such as making it possible for a child to cheat in an examination or to deceive with regard to the amount of change received from a store-keeper³⁵—but this has aroused a good deal of indignation among some people who resent the idea of “trapping” children by such methods. Tests for adults in the moral and social field will probably remain in the pencil and paper stage for some time to come.

We have then, in social psychology, these two methods of controlled observation, one taking place within the laboratory and the other, by means of standard instruments, taking place outside the laboratory. The advantages of controlled observation in the direction of precision, accuracy, and verifiability are generally conceded, but there are many disadvantages inherent in the method also. As Murphy points out, the data of laboratory experiments in social psychology apply only in the cultural setting in which they were secured.³⁶ Furthermore, the subjects of most laboratory experiments have tended to be a very highly selected group, usually of the college level. The ability to fill out a questionnaire or to check an attitude on a continuum requires a rather literate background and experience in articulating inner behavior. Most experiments have, therefore, not touched the man on the street, even within our own culture. Again, the fact that the subject is allowed only a limited range in his responses often arouses resentment or conflict on his part. He is allowed to say only yes or no when he feels that neither of these does justice to the way he really feels. The artificiality of the whole situation also tends to invalidate the results. In non-controlled observation, data are allowed to flow into the scientific hopper according to their own inner logic instead of according to the logic of the observer. This inner logic—or gestalt or pattern or

³⁴ In the field of attitude scales an important advance was made by L. L. Thurstone in 1929 when he published a method which made it possible to construct frequency distributions on attitude scales. The essential contribution of his method was to make the mathematical value of all the scale intervals equal. It still consisted, however, of verbal stimuli as above described. See Thurstone, L. L., and Chave, E. J., *The Measurement of Attitude*, 1929. See Lundberg, *op. cit.*, Ch. IX, for illustrations of attitude-measuring devices.

³⁵ See Folsom, J. K., *Social Psychology*, 1931, 276-78, for a summary of these techniques.

³⁶ *Op. cit.*, 8.

organic setting—may be a very important fact to consider when studying the behavior, but it must usually be ignored or destroyed by analysis in controlled observation. Again, just as in non-controlled observation we are likely to exaggerate the extent of our knowledge, in controlled observation we are likely to exaggerate the objectivity or non-personal nature of our results.⁸⁷ We tend to forget that back of every decision as to procedure and plan in the experiment the personality of the researcher was involved.

As to the relative merits of the various methods of observation in social psychology, we must conclude that no one of them is absolutely "the best." Each has its contribution to make and each has its limitations. A useful division of labor exists among them. The method of non-controlled observation is that of the explorer, or the pioneer. In ranging far afield to discover new continents his progress would be unduly hampered if he had to carry a heavy load of scientific instruments, but once the new territory is opened up to study, the more pedestrian methods of controlled observation come in to measure and to weigh.⁸⁸ The greater naturalness and organic completeness of non-controlled observational data, especially in the form of personal documents, and the tendency for controlled observational data to become atomistic and formal, have led to a demand for a method of combining the best elements in both. Among attempts along this line are those which apply known statistical techniques to the testing of non-controlled observational data. The work of Dr. Stouffer and Dr. Cavan is notable in this connection.⁸⁹

⁸⁷ This illusion of impersonality is fostered by the convention which has grown up of describing experimental studies in ponderous, impersonal language. "It was decided" takes the place of "I decided;" "The two series were correlated" takes the place of "I correlated," etc. In this way a feeling of objectivity is fostered which would in part be destroyed if the experiment were written up as a personal venture of the researcher.

⁸⁸ In the past, non-controlled observation was used more by sociologically trained social psychologists and controlled observation by the psychologically trained ones. But the former are now turning increasingly to methods of controlled observation. We need only mention the work of E. S. Bogardus in the field of social distance, E. W. Burgess, G. B. Vold, and S. Glueck, in the field of the behavior of paroled men, as illustrations of this trend.

⁸⁹ Stouffer, S. A., *Experimental Comparison of Statistical and Case History Methods in Attitude Research* (Doctoral Dissertation, Chicago, 1930); Cavan, R. S., Hauser, P. M., and Stouffer, S. A., "Note on the Statistical Treatment of Life History Material," *Soc. Forces*, IX:200-203 (Dec., 1930).

III. *Methods of Generalization*

Among the important methods of generalizing data in social psychology the following have been perhaps the most significant: the method of analogy, of informal statistics or subconscious induction, the comparative method, classification, and formal statistical method.⁴⁰ A few words with regard to each of these will show how they have been used.

First as to the method of analogy. In the language of the man on the street, this method is sometimes known as "jumping at conclusions." It is usually based upon certain conscious or unconscious, logical or illogical, but generally unproved, assumptions. In the field of social psychology five important types of analogical generalization will be discussed briefly.

The first was based on the assumption that conclusions which were valid for animal behavior also held for the social behavior of human beings. It was argued, for example, that since instincts so largely dominated the behavior of animals, therefore the same was true for men. For many years it was not uncommon in discussing the rôle of instinct in human behavior to cite the instinctive behavior of ants and wasps and sooty terns and mice, completely ignoring the tremendous difference which the presence of culture made between human and non-human behavior. The numerous attacks on this type of analogical generalization by sociologists and anthropologists⁴¹ during the 1920's, however, finally caused it to lose its prestige and it is seldom invoked at the present time.⁴² An analogous, but directly opposite, use of analogy is made by those who generalize about human behavior on the basis of machine behavior.

A second important use of analogy in social psychology is based on the assumption that conclusions which hold for preliterate peoples also hold for peoples with complex cultures and long literate histories. This method has been characteristic of the so-called

⁴⁰ Bernard, L. L., *Monist*, XXXVIII:292-320 (Apr., 1928).

⁴¹ See Bernard, L. L., *Instinct, A Study in Social Psychology*, 1924. For a summary of the literature of the instinct controversy, see Bernard, L. L., *Introduction to Social Psychology*, 1926, 599-600.

⁴² The application of the results of research on animals to human behavior is not always analogical. Sometimes, as in the case of the conditioned response, similar techniques produce similar results in both animals and men. But until the experiment is actually performed on human beings, the results of experiments on animals can be generalized to include man only by analogy.

French or Durkheim school of social psychology. André Jossain⁴³ has summarized the fallacies here involved as follows: (1) it makes the gratuitous assumption that modern primitives are similar to our prehistoric ancestors morally, socially, and mentally; (2) it assumes that races so diverse in physique, language, industry, mores, etc., are assimilable to the same mental and social types as those who emerged from animality in the later glacial epochs; (3) it assumes that modern primitives represent arrested development and not pathological development. Until these assumptions are proved valid, generalizations based on the data of preliterate peoples remain in the category of analogies when extended to modern man.

A third illustration of the use of analogical generalization is closely bound up with the second; indeed it is in some respects the converse of it. In this case the assumption is made that conclusions about human nature which hold in our culture are universally and eternally true of human nature everywhere. It was once assumed that human beings were endowed with instincts for war, for jealousy, for private property, etc., because in our own culture such patterns seem to be universal. On the basis of such an assumed, fixed, instinctive, human nature, certain institutions such as monogamy, war, private ownership, etc., were justified. Here again anthropological data finally undermined analogical generalization. Peoples were found who apparently had no instincts for war, private property, or jealousy, and yet they were undeniably human.⁴⁴ The conclusion was forced upon us that we cannot generalize about "human nature" in the sense of a fixed, universal phenomenon by analogy with "human nature" in any particular culture.

A fourth example is based on the assumption that the behavior of groups is identical with the behavior of individuals or that prediction for whole societies can be made on the basis of experiments on individuals. An illustration of this is the study made by Sorokin on the relative strength of selfish as contrasted with social motivation in children. From this study he drew conclusions as to the relative efficiency of whole societies organized according to different eco-

⁴³ "Les Deux Tendances de la Sociologie Française," *Rev. Internat. de Sociol.*, XXXIX:266-71 (May-June, 1931).

⁴⁴ See Faris, Ellsworth, "Are Instincts Data or Hypotheses?" *Amer. J. Sociol.*, XXVII:184-96 (Sept., 1921) for an excellent criticism of this form of analogical generalization.

nomic systems.⁴⁵ Much more famous, though now discredited, examples are the "social mind" and the "social organism" analogies. An extensive literature of criticism of these concepts has developed⁴⁶ to prove that there are no such things. These analogies, however, served a useful purpose in their time in teaching us to look at cultural and societal facts as organically integrated rather than as atomistic entities.⁴⁷

A final example of analogical generalization refers to the assumption that because physical traits of personality are distributed according to the normal curve, therefore moral and social personality traits are also thus distributed. Many years ago Boring⁴⁸ warned psychologists of the fallacies involved in this assumption and recent studies have shown him to be correct.⁴⁹ The very presence of cultural institutions from the moment we are born ceaselessly patterning and selecting our social behavior and attitudes violates one of the basic conditions of a bell shaped distribution. Most of the instruments designed to measure personality traits are based on the assumption of a continuum and, implicitly or explicitly, on the assumption of a normal distribution of the traits in question.

The student should not conclude that analogical generalization is

⁴⁵ "Imagine . . . that instead of four working children we have hundreds of thousands of laborers working many hours a day with the same difference in their efficiency as is given in the table; then it will be comprehensible what an enormous difference there would be in an output of the produce of labor of the two identical countries in one of which remuneration of the labors is equal, in another is unequal." Quoted from "An Experimental Study of Efficiency of Work under Various Specified Conditions," *Amer. Jl. Sociol.*, XXXV:765-82 (Mar., 1930).

⁴⁶ See Allport, F. H., *op. cit.*, 4-10.

⁴⁷ Bernard, L. L., "Herbert Spencer's Work in the Light of His Life," *Monist*, XXXI:1-35 (Jan., 1921), and "Herbert Spencer, the Man and His Time," *So. Atlantic Quart.*, July, 1923.

⁴⁸ "The Logic of the Normal Law of Error in Mental Measurement," *Amer. Jl. Psych.*, XXXI:1-33 (Jan., 1920).

⁴⁹ Thus, for example, R. L. Schanck, a student of Allport's, has found that attitudes toward certain institutions, mores, folkways, etc., in a given community distribute themselves according to a J-shaped curve (*A Study of a Community and Its Groups and Institutions Conceived of as Behavior of Individuals*, Psychological Monographs, No. 195, 1932). Again, the present writer found, in a sample of 252 individuals, that marital satisfaction was distributed according to a curve with a marked negative skew. This was in part due to the nature of the instrument used, but it is quite logical to assume, in the light of our knowledge of psychology, that a negatively skewed distribution may be normal for "happiness." We know, for example, that unhappiness or conflict arouses more consciousness than does satisfactory adjustment or happiness (Bernard, L. L., *Introduction to Social Psychology*, 159-60). Thus it is probable that one may fall much farther below average than above, on a "happiness scale."

never legitimate. There are times when one must "jump at conclusions" by analogy,⁵⁰ but this procedure should always be recognized for what it is and discarded as soon as pertinent data make it unnecessary. Nor should the student confuse generalization about a universe of phenomena from a representative sample with generalizing by analogy. If a sample has been chosen strictly according to the canons of random sampling, generalizing for the larger universe is not analogical but strictly and rigorously logical. The degree to which the sample departs from randomness, however, is a measure of the degree to which generalization for the universe approaches the analogical.

Little need be said about the use of informal statistics in social psychology since it does not differ from its use in general sociology where it has already been fully discussed.⁵¹ It is usually applied to the data of non-controlled observation where formal statistical methods cannot be used. Generalization from cases is a special type of informal statistical method or subconscious induction. As an illustration of this we may take Burgess' study of the influence of family tradition on personality. He presents seven cases (one taken from fiction) and from them draws the following conclusion, among others: ". . . these cases reveal that conflicts between parents and children, as well as mental and moral conflicts within the person, are almost always the result of the clash between family and community standards."⁵² This may be perfectly true, but seven cases (one from fiction) do not demonstrate it. We accept the generalization not on the basis of the cases but on the basis of our faith in Burgess' subconscious induction or informal statistical generalization from the many other cases he has studied. Generalization from cases in social psychology is justified only when the total number of cases extant is so small—as of feral men, for example—that any one constitutes a proportionately large sample, and when the distribution of which the case is a sample is so standardized, with a standard deviation so small that any case is likely to be fairly representative,

⁵⁰ Bernard, L. L., *So. Atlantic Quart.*, July, 1923.

⁵¹ Bernard, L. L., *Monist*, XXXVIII:292-320 (Apr., 1928).

⁵² "Family Tradition and Personality," in Young, K. (ed.), *Social Attitudes*, 1931, 205. Further along in the same article, however, Burgess recognizes the hypothetical nature of his generalization from these cases and suggests further studies along the same lines (205-206).

as in highly regimented societies where attitudes are rigorously controlled.⁵³

The comparative method in social psychology lies on a continuum between the analogical and the formal statistical methods. If qualitative similarities are emphasized it is likely to merge into the analogical method, but if quantitative differences are emphasized it becomes statistical. In the latter case it becomes an exact counterpart of the laboratory experiment where as many variables as possible are held constant in order to measure the influence of the one that is varied. In social psychology this is done by means of the control group, that is, a group matched in all particulars except one, such as sex or intelligence or economic status. When significant differences are found between such groups it is assumed that the differences may be attributed to the differentiating variable. When control groups are not available, the results are compared with what one could have expected on a chance basis, or partial correlation technique is substituted.

Numerous comparative studies have been made in the field of sex, racial, class, occupational and economic, nationality, and sibling differences with respect to temperamental, intellectual, and attitudinal traits.⁵⁴ A similar use of this method may be made on the same group before and after subjecting them to certain stimuli.⁵⁵ Even in such studies, however, control groups are desirable to check results since a certain amount of change in attitudes and opinions is probably always going on. A form of the comparative method has been applied in the study of environmental and hereditary factors, such as studies of foster children and of twins raised in different environments.⁵⁶

In social psychology, as in other sciences, when it is impossible to generalize data into frequency distributions, classification is used as a method of generalization. Thus we have classifications of tem-

⁵³ The violation of sampling procedure involved in generalizing from cases is so obvious as to require no elaboration.

⁵⁴ See Bernard, L. L., *An Introduction to Social Psychology*, 609-12, for a bibliography of such studies up to 1926, and Murphy, *op. cit.*, for more recent studies.

⁵⁵ E.g., Young, D., "Some Effects of a Course in American Race Problems on the Race Prejudice of 450 Undergraduates at the University of Pennsylvania," *Jl. Abnormal and Soc. Psych.*, XXII:235-42 (Oct.-Sept., 1927), and Rice, S. A., and Willey, M. M., "William Jennings Bryan as a Social Force," *Jl. Soc. Forces*, II:338-44 (Mar., 1924).

⁵⁶ These studies are summarized in Murphy, *op. cit.*, Ch. III.

peraments, of instincts, of wishes, of languages, of environments, of personality types, etc.⁵⁷ The tendency however is, wherever possible, to think in terms of continuums rather than of categories. The invention of concepts—psycho-social environment, social distance, etc.—is a form of generalization also widely used in social psychology.⁵⁸

Until recently the statistical method of generalization, in spite of Tarde's advocacy of it, was not generally available for use by the planes and currents school of social psychology. Within the past few years, however, it has been extended even here. The examples of Kroeber's study of fashions in dress, of Becker's and Hart's studies in intellectual fashions, already mentioned, illustrate this. In the field of personality the use of statistical methods of generalization is better established. As early as 1869 Galton was making his famous studies on the factors which produce great men, in the course of which he invented the method of correlation. Odin also made a statistical study of genius, coming, incidentally, to conclusions quite opposite to those of Galton.⁵⁹ Numerous studies on sub-, super- and abnormal personalities have been made in recent years in which the method of generalization used has been the statistical. From the logical point of view, generalization by means of time series analyses⁶⁰ is more useful for the planes and currents type of social psychology, while correlational analysis is more useful for the personality type.

Statistical generalization in social psychology may be said to be of two orders, the first referring to generalizations based on the original data themselves, the second to those based on previous

⁵⁷ Kretschmer, E., *Physique and Character*, 1925; McDougall, W., *Introduction to Social Psychology*, 1908; Thomas, W. I., *The Unadjusted Girl*, 1923; Boas, F., "Classification of American Languages," *Amer. Anthropologist*, XXII:367-376 (1920); Bernard, L. L., "Classification of Environments," *Amer. J. Sociol.*, XXXI: 318-32 (Nov., 1925); Wirth, L., "Some Jewish Types of Personality," *Pub. Amer. Sociol. Soc.*, XX:90-96 (1926); Guilford, J. P., and Braley, K. W., "Extroversion and Introversion," *Psych. Bull.*, XXVII:96-107 (Feb., 1930); Jung, C. G., *Psychological Types*, 1923. Folsom (*op. cit.*, 234-35) distinguishes between classes and types.

⁵⁸ Eubank, E. E., *The Concepts of Sociology*, 1932.

⁵⁹ See Ward, L. F., *Applied Sociology*, 1906, for a summary of the early statistical studies of genius.

⁶⁰ Tarde was especially interested in the analysis of time series, and it is extremely interesting to note how closely the curves actually obtained by Chapin ("Growth Curves of Institutions," *Sci. Mo.*, XXIX:79-82, July, 1929, "A Theory of Synchronous Culture Cycles," *Soc. Forces*, III:596-604, May, 1925, and *Cultural Change*, 1928, Chs. XI-XIV) for the behavior of inventions and institutions correspond to the type of curve predicted by Tarde in the work cited (p. 129).

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statistical studies. For example, in the field of criminal psychology, studies of criminal intelligence have accumulated to such a degree that Sutherland and Zeleny have been able to make statistical generalizations of a higher order on the basis of them.⁶¹ Since the physical conditions of research almost necessarily preclude large samples in any one study, it is particularly important that numerous studies on the same subject be made in different parts of the country, or world. Once these are made it becomes possible to analyse them statistically as successive samples and thus to eliminate many of the errors which limited samples so frequently contain. When hundreds of studies have accumulated in all of the fields of social psychology it may be possible to generalize their results into a dependable science of human behavior.

BIBLIOGRAPHY

- Allport, F. H., *Social Psychology*, 1924, Ch. VI.
 Bain, Read, "An Attitude on Attitude Research," *Amer. Jl. Sociol.*, XXXIII:940-57 (May, 1928).
 ——— "Theory and Measurement of Attitudes and Opinions," *Psychol. Bull.*, XXVII:357-79 (May, 1930).
 Bernard, L. L., "The Development of Methods in Sociology," *Monist*, XXXVIII:292-320 (Apr., 1928).
 ——— "The Evolution of Social Consciousness and of the Social Sciences," *Psychol. Rev.*, XXXIX:147-164 (Mar., 1932).
 Bogardus, E. S., *The New Social Research*, 1926.
 Burgess, E. W., "The Cultural Approach to the Study of Personality," *Mental Hygiene*, XIV:307-25 (Apr., 1930).
 Folsom, J. K., *Social Psychology*, 1931, Chs. VI, XIV.
 Hartshorne, H., and May, M. A., *Studies in Deceit*, 1928.
 Hartshorne, H., May, M. A., and Maller, J. B., *Studies in Service and Self-Control*, 1929.
 Hartshorne, H., May, M. A., and Shuttleworth, F. K., *Studies in the Organization of Character*, 1930.
 Lundberg, G. A., *Social Research*, 1929, Chs. VII-IX.
 Murphy, Gardner and Lois Barclay, *Experimental Social Psychology*,
 Palmer, Vivien M., *Field Studies in Sociology, A Student's Manual*, 1928, Pt. I, Ch. II; Pt. III, Chs. I-IV.
 Rice, S. A., *Quantitative Methods in Politics*, 1928.

⁶¹ Sutherland, E. H., "Mental Deficiency and Crime," in Young, K. (ed.), *Social Attitudes*, 1931, 357-75; Zeleny, L., "Feeble-Mindedness and Criminal Conduct," *Amer. Jl. Sociol.*, XXXVIII:564-76 (Jan., 1933).

- Rice, S. A. (ed.), *Methods in Social Science*, 1931, 395-445, 743-46.
 ————*Statistics in Social Studies*, 1930, Chs. XI, XII.
 Rivers, W. H. R., *Psychology and Ethnology*, 1926.
 Thomas, W. I., and Thomas, D. S., *The Child in America*, 1928.
 Thurstone, L. L., and Chave, E. J., *The Measurement of Attitude*, 1929.
 Vetter, G. B., "The Study of Social and Political Opinion," *Jl. Abnormal and Soc. Psych.*, XXV:26-39 (Apr.-June, 1930).
 Watson, G. B., "Character Tests and Their Applications Through 1930," *Rev. Educa'l Research*, II:238-46 (June, 1932).
 Willey, M. M., and Herskovits, M. J., "Psychology and Culture," *Psychol. Bull.*, XXIV:253-83 (May, 1927).
 Young, K., "The Measurement of Personal and Social Traits," *Pub. Amer. Sociol. Soc.*, XXI:92-105 (1927).

CHAPTER X

SOCIAL PSYCHIATRY

I. Definition of the Field in Terms of Research

A SCIENTIFIC generalization may be viewed as a statement of a more or less constant relation between two variables, or attributes. In social psychiatry one of these variables is something in the realm of personality disorder (or maladjustment), conceived as a function of the personality itself. It is something which may be said about a person generically to all or many situations, and not something, like a crime of circumstance, which is more closely related to the specific situation than to the previous history of the personality. The other variable, with which this one is correlated, is a variable of the realm of social interaction, social environment, or culture. The writer has examined some 150 recent and current research studies which seem to satisfy this criterion. That is, they investigate the relation between one or more psychiatric variables and one or more sociological variables. To select these studies the writer rapidly surveyed the following summaries of research material and included everything therein which seemed upon this hasty consideration to "belong" within the definition: Murphy's *Experimental Social Psychology*; *Social Science Abstracts* and *Psychological Abstracts*, both from April, 1931, to September, 1932, inclusive; the census of current research projects published in the *American Journal of Sociology* in January, 1932; the new census for 1932, and some additional, mostly earlier, material in the writer's files. In most of these studies the sociological factor seems to play the rôle of cause, but in some it plays rather the rôle of effect, and of course in many there is a relationship of mutual causation.

The studies were roughly classified, first according to the *method* of ascertaining the psychiatric data; second according to the *nature* of the sociological data, which nature itself seemed largely to imply the method of observation.

II. *The Psychiatric Classification*

A rough count was made of the methods used in the given studies, regarding as a unit the use of any one method in any one study. Since there was not time for careful determination, weighting, or checking, the results are stated with no more accuracy than the procedure warrants. The methods, in order of apparent frequency, were: (1) interviewing the subject (clinical interview), (2) reports made by acquaintances, teachers, etc., upon the behavior of the subject in answer to questions of simple fact, whether by interview or questionnaire, (3) the officially recorded facts of hospitals, schools, clinics, and so on, (4) pencil-and-paper personality or attitude tests, (5) tests of intelligence or specialized mental abilities, (6) community-cultural observation, (7) laboratory (apparatus) psycho-physical tests, (8) observation of short samples of overt behavior, (9) tests of the association, Rohrschach, or Aussage, type which cannot be scored automatically but which require analysis of the reaction material, (10) reports by acquaintances in the form of ratings rather than specific facts.

Intelligence tests appear in this material only as incidental to personality investigations; with a somewhat wider definition of the field they would be much more frequent. The community cultural observation method is the type employed in studies like Wirth's *Ghetto* or Margaret Mead's *Samoa* where the observer takes a kind of birds-eye psychiatric view of the behavior of many individuals and of their prevailing concepts of the behavior of their own fellow men.

The first three methods form a natural grouping. Interviewing the subject himself with reference to his personal history, his social relationships, and his conscious symptoms of disordered personality; interviewing or questionnairing his teachers, parents, or acquaintances in regard to definite facts which can be stated by them without much personal interpretation; and tabulating data from both of these sources under the simple categories of institutional records; these methods in general give us the kind of data used by practising psychiatrists and social case workers. They constitute our familiar case histories. Supplemented by a few simple psycho-physical or medical tests, they correspond roughly with the so-called clinical method. They are a wide exploration of the subject's be-

havior, including everything that might have any relation to his disorder. In general we might call them *case record data*.

The community-culture observation method constitutes a separate procedure of an entirely different type.

All the remaining methods might be grouped under the title of behavior tests or sampling methods. Instead of comprehensive but not easily comparable pictures of our subjects, these sampling methods give us data which are highly quantifiable and comparable, but narrow and specialized in scope and often trivial in their significance.

Altogether the case record data make up over half of the count of methods, the tests a large minority, and the community-culture observation a small fraction.

III. *The Sociological Classification*

This classification seems more suitable as a basis for the fuller discussion of the types of studies and their significance.

(1) *General psychiatric surveys and classifications which give frequency data*. In a sense these seem not to belong to the field of social psychiatry, since they merely determine the extent of various kinds of personality disorder without relating them as cause or effect of any definite sociological factor. In a larger sense, however, or indirectly, since these studies determine frequencies, reveal the race, class, or ecological distribution of personality disorders, show historical trends, or relate a sociological classification to a psychiatric, they are of considerable sociological significance. There are studies based upon state hospital statistics, such as those of Pollock, Malzberg, and Frankel. Of especial significance is Rosanoff's Nassau County Survey of mental disorders, in which it was determined through interviews in the community, that such disorders exist in the general population to an extent about nine times as large as found in the hospitals.¹ Then there are inventories of the kinds of personality problems found in children, made up from teachers' reports and clinic records. Then we have numerous psychiatric surveys of school and college populations by the test method, using especially the Thurstone inventory. Large quantities of these com-

¹ "Survey of Mental Disorders in Nassau County, N. Y.," *Psychiatric Bull., N. Y. State Hospitals*, II:109-231 (1917).

pleted questionnaires are on file in college offices without any research use having been made of them. By correlating these tests with sociological data on file regarding these same students some important findings might be made. Finally there are efforts to correlate specific maladjustment traits with one another and to establish patterns or syndromes of maladjustment which include sociological factors. Tilson, for example, found some rather high positive and negative correlations between the presence of certain problem traits in children.² In a German study Metelmann proposes the novel classification of criminals according to the methods they use to escape the consequences of their crimes.³ Reckless tentatively establishes types of disorganized or demoralized persons in sociological terms.⁴ In this class of studies case-record methods predominate over test methods.

(2) *Correlations of some one simple indicator of personality disorder with a large array of sociological factors.* Among such simple indicators are self-ratings of happiness, ratings or judgments of social adjustment, pleasing personality, etc., by acquaintances, and, strange bedfellow though it be with these data, the fact of suicide. The writer places all these in this same group because they all belong under the same general research pattern, which is that of widely exploring the sociological factors while keeping the personality indicator as simple and generic as possible. G. B. Watson's happiness questionnaire,⁵ because of its direct approach to the lowest common subjective denominator of personality adjustment, is significant. In Germany Kuhr has correlated suicide with handwriting and with the medical and family history of the deceased,⁶ and in this country Cavan's studies are highly important.⁷ Here also the case record method predominates, but with considerable

² "Problems of Pre-school Children," *Teach. Coll. Contrib. to Educa.*, No. 356 (1929).

³ "Zum Problem der Einteilung der Verbrecher nach Psychologischen Gesichtspunkten," *Monatsschr. f. Kriminalpsychol. u. Strafrechtsreform*, XXII:725-730

⁴ "Vice and Personal Disorganization," *Jl. Applied Sociol.*, XI:133-139 (1926).

⁵ "Happiness among Adult Students of Education," *Jl. Educa. Psych.*, XXI:79-109 (1930).

⁶ "Das Selbstmordproblem in der Lebensversicherung," *Z. f. d. Gesamte Versicherungs-Wissensch.*, XXXI:49-68 (1931).

⁷ *Suicide*, 1928.

use of the test methods, except in suicide cases, which still show high resistance to personality tests.

(3) *Correlations of psychiatric data with ecological position.* R. E. L. Faris is making an ecological study of insanity on the Chicago plan.⁸ The numerous ecological studies of crime, delinquency, desertion, and so on, are not counted here, since they are purely sociological, but they constitute an important borderland of research.

(4) *Correlations of psychiatric data with socio-economic status.* Here we have the application of personality tests to different occupational groups, and Fleming's English study of the relation of types of psychoses to occupation.⁹ There are comparisons of upper and lower social classes in their productivity of child behavior problems. Munroe and Levy found the daydreams of lower class children to be less of the heroic type than those of upper class children, thus suggesting that cultural influence is more important in this relation than the principle of compensation for inferiority.¹⁰ Case records and tests are both important here.

(5) *Relations of abnormal personality to the general culture of the region or group.* Perhaps some day there will be a subdivision of our field called cultural psychiatry. Studies such as those of Mead and Malinowski on primitive groups, and those of Wirth, Hayner, Zorbaugh, and Anderson on groups within our own society which may be said to have distinct cultural patterns of their own, point in a very important direction. Namely, while there are certain rôles and statuses common to possibly all groups which tend to cause or be caused by abnormal personality, yet there are certain regional or group culture patterns which are more productive than others of disorders. Studies of this class necessarily employ the seemingly vague method of a long-range view, trying to see whole patterns of human relationship which are not revealed by the more microscopic insights of usual methods. I have called this method the community-culture observation method. But tests

⁸ "Insanity Distribution by Local Areas," *Proc. Amer. Statis. Assn.*, XXVII:53-57

⁹ "Introverted and Extroverted Tendencies of Schizoid and Syntonic States as Manifested by Vocation," *Jl. Ment. Sci.*, LXXIII:233 (1927).

¹⁰ Reported in Murphy, *Experimental Social Psychology*, 1931, p. 415.

and summaries of case records may be also used. For example, the studies of Shen, Trow, and Pu show that Chinese do not overrate themselves on desirable traits as do Americans.¹¹ Margaret Mead finds in Samoa an absence of the rivalries and tabus which lead to our so-called adolescent period of storm and stress.¹² Then there are comparisons of various racial and religious groups in rates of insanity.

(6) *Correlations of psychiatric data with birth order and intra-family status.* First, there is the large crop of studies of ordinal position in relation to intelligence and personality disorders. This is a research vein which is perhaps nearly mined out. Fortunately the newer studies are investigating more complex and significant variables such as the fact of whether the subject's next younger sibling is of the same or opposite sex. R. F. Sletto at Minnesota is making a thoroughgoing classification of the possible patterns of sibling relationship. The work of Levy,¹³ and Goodenough and Leahy¹⁴ in this same field has been significant. Second, there are studies of the relation of broken homes to delinquency and problem behavior. Third, there are studies of the effect of early weaning upon personality. Case records and testing or rating methods are both important.

(7) *Family interaction.* In this group of studies, which merges somewhat with the preceding, the sociological variable is not one of simple factual character, such as ordinal position or marital status, but a more complex situation which needs some interpretation for its establishment. More elaborate case studies are necessary. The personality disorders investigated include jealousy, hatred, sex maladjustment. The Smith College studies of overprotection, the discovery of relationships between present personality and childhood interactions with parents as by Chassell's schedule, the classic case of unsatisfactory mother-daughter relationship by Miss Taft, belong here. Very significant is Smalley's finding of a correlation between

¹¹ Shen, E., "The Validity of Self-Estimate," *Jl. Educa. Psych.*, XVI:104-107 (1925); Trow, W. C. and Pu, A. S. T., "Self-ratings of the Chinese," *School and Soc.*, XXVI:213-216 (1927).

¹² *Coming of Age in Samoa*, 1928.

¹³ "A Quantitative Study of Behavior Problems in Relation to Family Constellation," *Amer. Jl. Psychiatry*, X:637-654 (1931).

¹⁴ "The Effect of Certain Family Relationships upon the Development of Personality," *Jl. Genet. Psych.*, XXXIV:45-72 (1927).

jealousy and the I. Q. difference between subject and object of jealousy.¹⁵

It might be proper to admit here the whole host of psychoanalytic case studies, which would well nigh swamp the whole field of social psychiatry. These studies, on the whole however, belong to the field of individual psychiatry. If they were brought together and given some statistical treatment, they would perhaps establish certain typical and generalized relations and sequences within personality disorders themselves. When it comes to showing the relation of the disorder to social causes, they for the most part assume what it is the real business of social psychiatry to prove. Only rarely, as in the intimate single-case scrutiny of Taft, or in the statistical correlation found by Hamilton¹⁶ between marital happiness and the fact of marriage to a woman physically like one's mother (or was it a tendency to *see* a likeness to the mother?), is the supposed causal relationship implied in such terms as the "Œdipus Complex" brought under controlled observation.¹⁷ Malinowski has shown that in Melanesian culture the Œdipus complex becomes an uncle-hatred complex while the relation between father and son is altogether affectionate.¹⁸

(8) *Correlations of psychiatric traits with opinion-attitudes or social valuations.* Social attitudes are in a sense data of the individual personality, but also in a sense sociological data. To hold a certain political attitude, may in some localities be practically equivalent to belonging to a certain occupational or social group. Studies of the distribution and changes of these opinion-attitudes do not belong to social psychiatry but rather to social psychology. However, there are some studies which correlate these data with more basic personality factors, which imply maladjustment. In these we are interested. Klein's finding of a correlation between radicalism and father antagonism, for instance, is typical of the sort of relationship investigated here.¹⁹ These studies rely heavily on the testing method.

¹⁵ "Two Studies in Sibling Rivalry, II. The Influence of Differences in Age, Sex, and Intelligence in Determining the Attitudes of Siblings toward Each Other." *Smith Coll. Stud. in Soc. Work*, 1:23-40 (1930).

¹⁶ Hamilton, G. V., *A Research in Marriage*, 1929.

¹⁷ Taft, Jessie, "The Effect of an Unsatisfactory Mother-Daughter Relationship upon the Development of a Personality," *Family*, VII:10-17 (1926).

¹⁸ *Sex and Repression in Savage Society*, 1927.

¹⁹ *The Relation between one's Attitude to his Father and his Social Attitudes*, Master's Thesis, Columbia, 1925.

(9) *Correlations of psychiatric data with social change and social mobility.* Plant has investigated the relationship between personality disorders in children and the moving of families to new neighborhoods where they are not well received.²⁰ Angell and others are investigating the effects of reduced income upon families.²¹ Eliot's plans for the study of family bereavement are important.²² Here testing methods are little used, but case records and also community-cultural observation are applied.

(10) *Correlations of psychiatric data with delinquency or criminality.* These studies rely mostly upon the testing method of securing personality data. The usual method is to compare test scores of delinquents with those of non-delinquents, or of recidivists with others, or of different classes of delinquents with one another. In general it is possible to pick out delinquents from others by tests such as the Woodworth, the Chambers Emotional Maturity Test, and some of the "objective" behavior tests used by Lentz, Cady, Raubenheimer, May, and Hartshorne. The correlation however is seldom high enough to be useful in diagnosing or predicting for an individual case. There are studies of the relative intelligence of criminals and non-criminals which would, if we pursued them far, carry us beyond the borders of our field. Healy and his colleagues have done notable work with the case-record methods. In general, studies of this class imply the less usual relationship in which the personality disorder appears as the cause rather than the effect of the sociological fact of delinquency.

(11) *Correlation of psychiatric traits and marital conflict.* The exceedingly long and highly standardized interview method used by Hamilton, in which the questions were presented by printed cards, is unusual. So also is Terry's procedure for finding patterns or syndromes by visual inspection of the punched holes in cards over a lighted table.²³

(12) *Relations of psychiatric data to treatment procedures.* From a research point of view there is no good reason to separate pure

²⁰ "Sociological Factors Challenging the Practice of Psychiatry in a Metropolitan District," *Amer. Jl. Psychiatry*, VIII:705 (1929).

²¹ Research in progress.

²² "The Bereaved Family," *Annals Amer. Acad. Pol. and Soc. Sci.*, CLX:184-190 (March, 1932); "The Adjustive Behavior of Bereaved Families: A New Field for Research," *Soc. Forces*, VIII:543-549 (1930).

²³ "A Study of Psycho-dynamic Patterns," *Amer. Jl. Psychiatry*, VIII:881-899 (1929).

from applied science. One simply applies certain treatments, then studies the changes following such treatments as he would any other sequential relationship. Healy and his colleagues' study of the effects of foster home placement upon children in relation to the clinical diagnosis made upon the children before treatment is a landmark in this field.²⁴

Witmer is making a study of the factors associated with a change of I. Q. in children.²⁵ She is also studying the clinical records of persons who later became psychotic. In this field the case record method is of predominant importance.

(13) *Psychiatric analysis of social patterns.* By this clumsy phrase I mean the attempts to analyze social behavior, social interaction, social change processes, cultural thought patterns, and so on in terms of psychiatric, including psychoanalytic concepts. Representative is Eliot's article on the Psychoanalytic Interpretation of Group Formation and Behavior.²⁶ He is now studying the similarity between the Utopian mechanism in social reform programs and the mechanisms of escape and compensation in disordered personalities. Somewhat related to this is Lindeman's description of mental hygiene factors in community processes.²⁷ The methods used here are those we have classified as community-culture observation. One does not rely upon systematized measurement or observation of definite samples of individual cases; the observer uses more or less obvious facts ascertained from varying sources, and analyzes their patterns and sequences. This class of research has its chief value as an exploratory or pathfinding procedure. Two words of caution might be uttered in relation to this research, first, the processes by which human drives and wishes lead to social interaction and culture patterns are often more direct than seems to be implied by the psychoanalyst. All wishes do not pass through a stage of frustration and consequent substitute-finding, compensation, and so on. Second, there is danger in analogies between the processes we call psychic mechanisms or personality dynamisms and the processes of social interaction. They belong to two different orders of being. For

²⁴ Healy, W., Bronner, A. F., Baylor, E. M. H., and Murphy, J. P., *Reconstructing Behavior in Youth: A Study of Problem Children in Foster Families*, 1929.

²⁵ Research in Progress, Smith College.

²⁶ *Amer. J. Sociol.*, XXVI:333 (1920).

²⁷ "Some Mental Hygiene Factors in Community Processes," *Nat. Conf. Soc. k., Proceedings*, 1931, 305-314.

example consider H. A. Miller's concept of the oppression psychosis in immigrant groups.²⁸ This might mean that a social situation called oppression causes certain paranoid reactions in oppressed individual A, and has a similar effect upon B, C, and so on. The term then means merely an aggregate of several individual psychoses. But evidently something more is meant. Namely, that the psychosis of B is produced not merely by the oppression but also by the suggesting, pattern setting power of the psychosis of A. We have a social interaction pattern which tends to reënforce and standardize a certain type of abnormal behavior in many or all members of the group. But let us call it some kind of interaction process, and reserve the terms psychosis, neurosis, defense mechanism, compensation, introjection, etc., for the actual behavior resulting in the individual. But there is still a third possibility. Perhaps the subject of the psychosis is neither the actual individuals nor the actual group, but a kind of symbolic personality created by the group in that part of its culture which we call its ideology or thought-system.

But does a group always create such a symbolic personality to represent itself? Is the personification of the we-group and the others-groups an inevitable and universal result of social interaction, or is it just one out of several cultural possibilities which happens to have become rather general in Euro-American culture with its nationalism and patriotism? If this personification did not occur, the psychiatric concept might have no meaning here. There should be a wide exploration of primitive cultures in regard to terms in which the individual members conceive their group.²⁹

²⁸ "The Oppression Psychosis and the Immigrant," *Annals Amer. Acad. Pol. and Soc. Sci.*, XCIII:139-144, (Jan., 1921).

²⁹ A recent study by Ruth Benedict in this connection deserves special attention. She classifies several American Indian cultures into types characterized each by a "dominant drive," which leads to a general "configuration" which then regulates the borrowing of new traits and also determines what types of *personality* will have free expression in the given culture and what types will be inhibited or regarded as "abnormal." These dominant drives and configurations may in many cases be described as techniques of handling the emotions; three of them closely correspond, respectively, to paranoia, manic-depressive psychosis, and emotional self-control with occasional neurosis. "Configurations of Culture in North America," *Amer. Anthropologist*, XXXIV:1 (1932).

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IV. *Sources of Data*

As to the original sources of data in social psychiatry, they come mainly from the examination of hospital and clinic patients, and of students, from nursery school to graduate school. There is also a mine of material in the records of the clients of family welfare societies and other social agencies. Since most of this latter material is gathered without psychiatric purpose or point of view, it is a poorer ore, although rich in spots. We do not know how representative a sample of the mass of human behavior is constituted by this available material, even if taken in its totality. We need some intensive community-wide studies of personality disorder. The New York State Hospital Commission's canvass of mental abnormality in whole communities is one type of study needed. We need to discover and enlist the coöperation of physicians, clergymen, and other intimate knowers of wide ranges of personalities in average groups. We need to develop an easy technique by which these everyday knowers of men and women may be persuaded to report their observations without taking time to make special investigations. We need a psychiatric *Middletown*.

One device of research coöperation that might be useful would be the assembling of record and test schedules used by as many as possible of the institutions and practising psychiatrists who are believed to do work of scientific value with notes as to the available quantity of each kind of record. Tucked away somewhere in the files of some school, clinic, or physicians office may be five hundred cases giving just the sort of data a given research worker wants, and giving them better than do the sources where he has expected to find them.

V. *Trends in Methods of Observation and Recording of Data*

(1) Perhaps the most important methodological trend in the field (and it applies to kindred fields such as social psychology as well) is the effort to reduce case record material to statistical form. While case-records provide short blank spaces for brief answers to simple questions, still most of the important material in them appears as long narratives, quoted remarks, and so on. Miss Witmer is quantifying case records of some 500 child guidance clinic pa-

tients, having several students code each case and comparing results, and defining various degrees of adjustment or maladjustment. Mrs. Cavan⁸⁰ and others are working on the statistical treatment of life history material. Stouffer⁸¹ finds a correlation of .86 between prohibition attitudes measured by test and the same measured by having judges rate case histories. In 1925 R. C. Travis⁸² proposed that the only proper way to validate a test is by correlating it with case histories and not with ratings by acquaintances. The trend is toward a fusion of the case history and the more objective attitude questionnaires. This will avoid the excess verbiage of the older case-record and also the meaningless specificity of the older tests. It will give us a picture of a person's behavior which is fairly comprehensive and also quantifiable along several different dimensions. Suggestive of this type of schedule is the one by Chassell.⁸³

Much has been said about the case method versus the statistical method of research as if they were poles apart. To be sure isolated case studies have often been made, as in the Chicago researches, for the purpose of checking and illustrating certain generalizations drawn from statistical or ecological studies, and without any intention of accumulating further case material of the same kind. But it must now be apparent that if enough case studies of the same kind be made, they automatically produce the material for statistical investigation, and hence the main problem becomes that of standardizing and quantifying the case material. And as our research becomes organized on a larger scale, with more centralized guidance, this will be the procedure which will yield the really important results.

(2) Although the main promise may lie in the analysis of case material, yet occasionally striking results come from *tests* or behavior samples and it is to be expected that some of us will and should continue to explore such avenues. For instance, J. N. Washburne⁸⁴ was able to make a remarkably clear distinction between

⁸⁰ "Note on the Statistical Treatment of Life-History Material," *Soc. Forces*, IX:200-203 (1930).

⁸¹ *An Experimental Comparison of Statistical and Case-History Methods of Attitude Research*, Doctor's dissertation, Chicago, 1930.

⁸² "The Measurement of Fundamental Character Traits by a New Diagnostic Test," *Jl. Abnormal and Soc. Psych.*, XIX:400-420 (1925).

⁸³ Chassell, J. O., *The Experience Variables*, University of Rochester Medical School, 1928.

⁸⁴ "An Experiment in Character Measurement," *Jl. Juvenile Research*, XIII:1-18 (1929).

"good" and "bad" children by asking them to choose between two hypothetical satisfactions. Moore⁸⁵ and later Holsopple⁸⁶ have found mirror drawing ability to be more significant than might be expected *a priori*.

(3) Probably we have been limiting our view through the traditional practice of making our unit of investigation either the individual person, or, in some cases, the family or community. It seems, looking at the whole field from the standpoint of social interaction, that a fairly definite unit of study might consist in the personal-interactional relationship between two persons. The studies of domestic discord by Groves,⁸⁷ the Mowrers,⁸⁸ Cottrell's study of rôles, and the attack upon the same problem by the Binkleys in *What's Right With Marriage* (1929) are suggestive of this approach. In such a view the community would not be comprised of persons, but of a multitude of pair-relationships, some fairly static, some changing.

(4) There is promise in studies in which the unit of observation would not be a personality, but a change in personality. The Healy study of reconstructing behavior is suggestive. Certainly changes in personality are among the phenomena which most strike the attention of everyday observers, and it is easier to describe such a change than it is to describe adequately a personality "as is."

VI. *The Mathematical Treatment of Data*

Mathematically precise methods such as the correlation coefficient are less used than in some kindred fields. This seems quite as it should be. At this stage it is more important to examine a large variety of correlations by crude methods than to measure fewer correlations more accurately. The comparison of averages in terms of their probable error, and the use of simple fourfold correlation tables, seem quite adequate for the great majority of data in this field. In a small study of the writer's of the similarities and dis-

⁸⁵ "Innate Factors in Radicalism and Conservatism," *Jl. Abnormal and Soc. Psych.*, XX:234-244 (1925).

⁸⁶ "The Social Adjustment of Delinquents who are Unable to Inhibit Old Automatic Perceptual Responses," *Jl. Soc. Psych.*, III:91-97 (1932).

⁸⁷ *Social Problems of the Family*, 1927; also Groves and Ogburn, *American Marriage and Family Relationships*, 1928, Chs. III-VIII.

⁸⁸ Summarized in Mowrer, *The Family*, 1932.

similarities of attitude between members of friendly or engaged pairs, he found the simple method of getting the ratio between actual and expected agreement to be more serviceable than any method of computing a Pearson r . Such methods might be applied on a large scale to the masses of Thurstone test material now available, to test out psychiatric theories of association between certain symptoms. We are not yet statistically certain as to what are the consistent syndromes or types of personality disorder.

Thurstone himself has worked out a short method for determining the clusters or general factors among a group of variables whose intercorrelations are given. Now that such rapid techniques are available, it is to be hoped that statistical research problems will be selected less on the basis of accurate measurability, and more on the basis of the insights and "hunches" derived from case studies.

VII. *Relation of Research to Art in Social Psychiatry*

It is possible to achieve much effective treatment in social psychiatry as an art, as in medicine, without verbalized generalizations which have been systematically tested by research methods. One proceeds, we say, by the light of his experience, and by trial and error. He learns by experience to recognize more quickly than the layman the signs that a given trial is not succeeding, and that another trial is necessary. It may be held, indeed, that generalizations are impossible, because each case is so different from any other. However, a more careful analysis might show that such "practical experience" always consists of generalizations, that these generalizations are simply not verbalized, because of the difficulties of our language and because of the practical worker's reluctance to spend time in the manipulation of language symbols and numerical symbols when he might be manipulating personalities.

Perhaps there will always be necessary a division of labor between the practising artist and the research worker who perforce must work with the symbols of socio-psychiatric phenomena rather than with the phenomena themselves. But a closer understanding between the two will be of immense value. The artist must learn to be more flexible in his use of terminology, must realize that he can adapt the language symbols of his experience without destroying the essential insights of that experience. The research worker must

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look more to the artist's experience and less to his existing symbol system to get those "hunches" which should direct his research activity. In the recorded experiences of the psychiatrists and of psychiatric sociologists such as Groves³⁹ are to be found empirical generalizations that are more worth testing than are many tentative correlations arrived at through purely logical or statistical procedures. Art is not merely the product of science; it also furnishes much of the raw material of science.

BIBLIOGRAPHY

- Chassell, J. O., "The Experience Variables," *Experience Variables Record* (separately bound), University of Rochester Medical School, 1928.
- "Proceedings, First Colloquium on Personality Investigation," *Amer. Jl. Psychiatry*, VIII:1089ff. (1929).
- Eliot, T. D., "The Adjustive Behavior of Bereaved Families: A New Field for Research," *Social Forces*, VIII:543-549 (1930).
- "The Psychoanalytic Interpretation of Group Formation and Behavior," *Amer. Jl. Sociol.*, XXVI:333-352 (Nov., 1920).
- Krueger, E. T., "The Technique of Securing Life History Documents," *Jl. Applied Sociol.*, IX:290-298 (1925).
- Lundberg, George A., *Social Research*, 1929, pp. 197-242.
- May, Mark A., "Problems of Measuring Character and Personality," *Jl. Social Psych.*, III:131-145 (1932).
- Murphy, G. and L. B., *Experimental Social Psychology*, 1931, pp. 487-491, 575-578.
- Rice, S. A., ed., *Methods in Social Science*, 1931, pp. 176-185, 480-488.
- ed., *Statistics in Social Science*, 1930, pp. 197-216.
- Rosanoff, A. J., *Manual of Psychiatry*, 6th ed., 1927, pp. 347-380, 418-426.
- Shaw, C. R., *The Jack Roller*, 1930, pp. 1-44.
- Slawson, John, "Causal Relations in Juvenile Delinquency Research," *Pub. Amer. Sociol. Society*, XXII:169-173 (1928).
- Symonds, P. M., *Diagnosing Personality and Conduct*, 1931.
- Terry, Gladys, "A Study of Psychodynamic Patterns," *Amer. Jl. Psychiatry*, VIII:881-899 (1929).
- Thomas, D. S., et al., *Some New Techniques for Studying Human Behavior*, 1929.
- Thomas, W. I. and D. S., *The Child in America*, 1928, pp. 435-467.
- Thurstone, L. L., and Chave, E. J., *The Measurement of Attitude*, 1929.

³⁹ See, for example, *Personality and Social Adjustment*, 1932.



CHAPTER XI

EDUCATIONAL SOCIOLOGY

*General Forms of Research*¹

VIEWING the study of social phenomena broadly, we may distinguish four types of research procedure. First, the *philosophical*. This consists in defending hypotheses by an appeal to the principle of internal consistency and of consistency with all the known facts that come within the universe to which they belong, and upon a satisfactory disposal of all alleged difficulties or other obstacles to the adequacy of the hypothesis, the defense resting upon argument. The philosophical method stresses *system* rather than isolated connections and seeks *rationalization* of its generalizations. Examples of the philosophical method in sociology are Bosanquet's *Philosophical Theory of the State*, Giddings' *Studies in the Theory of Human Society*, and most of the work of C. H. Cooley.

Second, is the *historical method*. This may take the form of conventional historical research, based upon printed records remaining from earlier times, or it may assume the form of a study of tribes of people now living in isolated parts of the world where primitive types of culture still persist, on the assumption that these persisting primitive cultures are probably similar to those that constituted the early stages of all societies. In the field of Educational Sociology a very good representative of such historical approach is Todd's *The Primitive Family as an Educational Agency*.

Third, is the *scientific method*. This is characterized by the utilization of a set of controls, refined through several centuries of development, for making observations precise and for eliminating from them the influence of the personal equation of the investigator. It is exacting safeguards in generalization rather than the nature

¹ It is not possible to make a classification of research into discrete forms with clear-cut boundaries. No matter how we seek to classify our types they run together at the margins. In this chapter we shall be continually confronted with that difficulty. Nevertheless we can introduce system into our discussion only by attempting *some* classification, even though its divisions are not sharp.

of content that determines scientific method, by reason of which fact scientific method is inherently as applicable to the study of social phenomena as it is to the study of physical phenomena.

The fourth method is *analytically impressionistic generalization*. This represents the pre-scientific stage of inductive research. The author of such material has equipped himself with a background of sociological theories and concepts and on the basis of these he observes conduct and generalizes about it. He tries, of course, to be impartial, analytic, and true to objective reality but he employs either no quantitative controls to guard his generalizations against overshooting their mark or else very loose ones. Such impressionistic generalizations constitute the bulk of sociological literature, that of Educational Sociology included. They serve a very useful purpose in giving us a provisional description of social behavior. But we shall have a *science* of educational sociology only to the extent to which we subject each of these provisional generalizations to carefully guarded inductive tests. The essence of the scientific method is a set of techniques for guarding inductive generalizations from the pitfalls toward which the human tendency to conclude hastily, and to make the wish the father of the thought, impel them. Among these techniques the use of quantitative controls to force precision of observation and accuracy in the stating of relationships plays so essential a part that we may well suspect a study of falling short of the demands of science, and of belonging to either the first or the fourth of the categories listed above, if it does not employ them.

The vast bulk of the literature of Educational Sociology belongs either to the first ² or to the fourth of the above-mentioned methods. A little of it belongs to the second, the historical. But there is a growing body of material involving quantitatively controlled scientific procedures. It is to a discussion of this type that the remainder of this chapter is devoted.

Means of Measurement in Educational Sociology

What instruments for the collection of objective data are available to educational sociologists? We shall name a number of them.

² Peters, C. C., "Revealed Philosophies: A Reply to Professor Kilpatrick," *Jl. Educa. Sociol.*, IV:260-271 (Jan., 1931).

1. *Life histories and other documents that lend themselves to objective analysis.* These may be diaries kept for a specific purpose by a set of individuals. Such diaries were kept by women for Charters' studies at Stephens College in order to reveal the problems with which women are confronted in life as evidence of the proper content of a college curriculum. Or they may be such more or less scattered biographical sketches as Terman employed in his *Genetic Studies of Genius* (1928-1930), or such snatches of autobiography as those embodied in the personal letters on which Thomas and Znaniecki based their studies of *The Polish Peasant in Europe and America* (1918). The essential thing is that the documents lend themselves to tabulation of repetitive units upon which quantitatively supported generalizations may be based.³

2. *Interviews conducted in such systematic fashion that responses covering precisely the same item may be secured from a number of representative persons, tabulated, and the generalizations worked up quantitatively.* The United States Census is a highly schematic form of such interview. The Binet-Simon test of general intelligence is really a standardized interview, the results of which may be quantitatively interpreted. Donald Snedden developed a type of interview that could be used as a disguised intelligence test for older persons. W. W. Charters has done much work on the development of the systematic interview and interview technique. One of my own students, Mr. Ralph Sterrett,⁴ made a typical study of this type in educational sociology on the qualities needed by an activity sponsor in the junior high school. On the basis of interviews with twenty-four schoolmen Mr. Sterrett listed forty traits needed by an activity sponsor, indicated as evidence of relative importance the number of times each had been mentioned, and quoted under each item specific manifestations of these traits for the sake of giving concreteness to the picture. Thrasher and many other sociologists have used the interview technique,⁵ but the generalizations arrived at have not always been quantitatively supported.

3. *Questionnaires filled out in writing by the respondents have*

³ Bain, Read, "The Validity of Life Histories and Diaries," *Jl Educa. Sociol.*, III:150-164 (Nov., 1929).

⁴ Sterrett, K. F., "Trait Analysis of an Activity Sponsor in the Junior High School," *Jl Educa. Sociol.*, II:148-155 (Nov., 1928).

⁵ Whitley, R. L., "Interviewing the Problem Boy," *Jl Educa. Sociol.*, V:140-151 (Nov., 1931).

been employed more than perhaps any other objective research device.⁶ George S. Counts⁷ investigated the social composition of boards of education, ascertaining for members of a large sampling of public school boards, university boards of control, and state boards of education, the age, occupation, educational background, number of children, etc., and worked these findings into a description of the typical school board member. O. E. Reynolds⁸ used the questionnaire to learn the social and economic status of college students, determining parental occupation, parental income, nativity, size of families, affiliations of students, and self-support among them. O. M. Mehus employed this same instrument in studying the extent and type of participation in extra-curricular activities at the University of Minnesota.⁹ Their reliability, and especially their validity, is impaired by the haste and carelessness with which they are often filled out. Shuttleworth¹⁰ has secured some evidence that we may get an improvement in reliability and probably in validity if we pay the respondents a small fee for their trouble.

4. *Confessions on personality inventory blanks* are a type of questionnaire, but one on which the responses are intimately personal. The form requests declarations revealing the habits, tastes, interests, prejudices, hopes and fears of the respondent. They are represented by such instruments as Allport's *A-S Reaction Scale*, Allport and Vernon's *Study of Values*, the Pressey *X-O Test*, the Strong *Vocational Interest Blank*, and the Thurstone *Personality Schedule*. One of the latest and best is Bernreuter's *Personality Inventory*. Dr. Bernreuter claims for this a reliability coefficient of .86 and validities of .60 with self-ratings and of .84 to 1.00 with other personality rating schemes when corrected for attenuation.

5. *Estimates by peers*. Formerly it was believed that estimates of traits by one's fellow pupils, or by others of his own class, were very crude measures of his actual traits. But recent studies have shown them to be very promising measuring devices. We have employed pupil estimates in at least a half-dozen studies at Penn State within

⁶ Koos, L. V., *The Questionnaire in Education*, 1928.

⁷ *Social Composition of Boards of Education*, 1919.

⁸ *The Social and Economic Status of College Students*, Teachers Coll., Bureau of Publications, 1927.

⁹ "Extra-Curricular Activities at the University of Minnesota," *Jl. Educa. Sociol.*, 1:545-552 (May, 1928).

¹⁰ "Study of Questionnaire Technique," *Jl. Educa. Psych.*, XXII:652-658 (Dec., 1931).

the past five years and have always found the reliabilities very high when the average of estimates from ten or more persons was employed on any one item. Our most elaborate study of this type was made during the academic year 1931-32 by James C. Swab.¹¹ He had thirty seventh-grade pupils give estimates of one another on age, height, intelligence, courtesy, honesty and grades deserved in arithmetic. He also had thirty-four eighth-grade pupils estimate one another on the same items. By determining the average inter-correlations and stepping this up by the generalized Spearman Prophecy Formula he got the following surprisingly high coefficients of reliability: In the seventh grade: age .974; height .993; intelligence .978; courtesy .960; honesty .960; arithmetic grades .985. In the eighth grade: age .960; height .991; intelligence .984; courtesy .972; honesty .987; and arithmetic grades .979. He found these estimates of age to agree with actual age with a correlation of .525 in the seventh grade and .610 in the eighth grade; estimated intelligence with intelligence test scores .340 in the seventh grade and .210 in the eighth grade; arithmetic estimates with the grades actually assigned by the teacher .770 in the seventh grade and .845 in the eighth grade; and estimated height with measured height .965 in the seventh grade and .840 in the eighth grade. When we remember the rather high degree of homogeneity in the single grades which would operate to lower the coefficients of correlation, and the probable lack of complete validity in the measurement of actual arithmetic grades and especially in the measurement of intelligence, these reliability and validity correlations are remarkably high. In fact, they are as high as the reliabilities and validities attained in the very best of our objective verbal tests. If these findings with regard to the value of estimates continue to be borne out by other investigations, as they so far have been by practically all that have been reported, the availability of estimates as measuring instruments opens up to the sociologist areas for the application of quantitative methods not hitherto accessible.¹²

6. *Estimates by superiors* are estimates of pupils by teachers, of men by their employers, of criminals by guards and judges. Here, too, individual judgments are not highly reliable but good reliabilities may be secured from consensus of estimate. Such estimates

¹¹ Unpublished M. A. Thesis, Pennsylvania State College, 1932.

¹² Symonds, P., *Diagnosing Personality and Conduct*, 1931.

have the advantage of being made by persons of higher average mentality, perhaps. But superiors labor under the handicap that they are usually less intimately acquainted with the persons upon whom they pass judgment than are peers; and it is known that the validity of estimates is directly related to the fullness of the rater's knowledge of the persons rated. Furthermore, we are less likely to get as large a number of superiors who know a given subordinate well than of peers who know him well, and smallness in the number of judgments consolidated makes for lower reliabilities. In a form rather different from the one we have so far had in mind, Bogardus¹³ has made measurements of social distance by composite estimates of groups by outsiders, and by still different techniques for handling this same basic method of measurement Thurstone has investigated attitudes toward races and nationalities.¹⁴

7. *Estimates on objects other than personal traits* are to be employed where one to one relations with such tangible devices as centimeters, grams or seconds are not possible but where quantity in some form is present. To get high reliabilities and high validities we need here, also, consensus of estimate rather than individual estimates. We have recently employed this device in measuring the mores and in measuring the divergence of conduct in motion pictures from the mores. We obtained satisfactorily high reliabilities, reaching the upper .80's in most applications and in many of them going as high as .99 or above.¹⁵

8. *Identification of individuals as belonging in certain particular categories.* We employ this in its simplest form when we count the number of homes having telephones, bathrooms, or automobiles. Ingenious variations of it, to be employed where the margin between presence and absence is not a clear-cut one, are found in the portrait-matching tests or the Guess-Who tests. When the Guess-Who type of test is employed, those persons get listed as belonging in the category in question who possess a trait with sufficient prominence that they come to the mind of the respondent when the specifications of the category are announced in concrete form. We are

¹³ Bogardus, E. S., "Measuring Social Distances," *Jl. Applied Sociol.*, IX:299-308 (Mar.-Apr., 1925).

¹⁴ Thurstone, L. L., "A Scale for Measuring Attitudes toward the Movies," *Jl. Educa. Research*, XXII:89-94 (Sept., 1930); Thurstone, L. L., and Chave, E. J., *The Measurement of Attitude*, 1929.

¹⁵ Peters, C. C., *Motion Pictures and Standards of Morality*, 1933.

using this type of measurement in connection with a series of controlled experiments on character education at Pennsylvania State College this year, and believe it holds considerable promise.¹⁶

9. *Verbal responses on objective tests* are employed for measuring information or judgment, usually either by very short answers from the respondent, or by his selection from among alternative responses. Essay answers may, however, be employed if scoring rules are adopted so as to make the scoring objective. Such new-form tests have had very extensive use during the past twenty years, and there is considerable literature on their forms, reliabilities, and validities.¹⁷

10. *Overt behavior in response to stimuli* so arranged as to encourage the specific acts which it is the investigator's purpose to study. Many such tests have been developed recently, especially in connection with the Character Education Inquiry. Examples of them are the Maller Self-Marking Tests, the C.E.I. Coördination Tests, and the C.E.I. Puzzles Tests. A number of such tests have, however, been in existence for some years and a group of them was used in the study of the *Rôle of Ideals in Conduct* by Dr. Voelker. Besides Voelker's study another investigation making elaborate use of such objective measures of actual conduct is that on deceit by Hartshorne and May.¹⁸

11. *Score cards with standardized categories* are intended to direct and control observation so as to get the observed object fully and systematically exploited. Often these score cards contain, in addition to the specification of the relevant elements of the situation, quality norms on each item, and customarily they permit the results to be worked up in definitely quantitative ways. Well known examples of such score cards are the *Sims Score Card of Socio-Economic Status*, the Chapin Score Card for a similar purpose, the *New York Rating Scale for School Habits*, the *Upton-Chassell Score Card for Good Citizenship*, and the *Haggerty-Olson-Wickman Behavior Rating Scales*. On the last mentioned the authors claim a reliability coefficient of .92 and correlations between ratings on the scale and measures involved in other approaches to essentially the same traits

¹⁶ Peters, C. C., and others, "Experiments with Moral Instruction," *Jl. Educa. Sociol.* (Nov., 1933).

¹⁷ Ruch, G. M., *The Objective or New Type Examination*, 1929.

¹⁸ Hartshorne, H., and May, M., *Studies in Deceit*, 1928.

of from .60 to .76. Dr. Sims found ratings by siblings on his score cards when referring to the same homes to correlate .95.¹⁹

12. *Anthropometric measurements* of height, weight, lung capacity, back and leg strength, hæmoglobin content, red corpuscular count, etc. These may be employed in investigations of the effects of play, of living under certain conditions of sanitation, of long hours of work, of dancing or other forms of amusement, etc. They are, of course, highly reliable types of measurements and have validities depending upon the pertinency of the measures to the hypotheses investigated.

Forms of Research in Educational Sociology

So far we have been concerned about methods of collecting data. But scientific research only begins with the collection of data. Or rather, collecting of data is the second step in research, the first step being the formulation of an hypothesis for the sake of testing which the data are needed. The pivotal step in research is the work-up of the data so as to yield well supported generalizations. There are a number of forms that the organization of research may take.

1. *Case studies.* These involve a very intensive investigation of individual cases. The method often utilizes interview with each subject and with others about him, questionnaire to him and to others about him, inspection of his environment, and batteries of physical, mental, and educational tests administered to him. Customarily the investigation of a case moves through a rather fixed schedule, in order to insure a balanced and thorough examination.²⁰ Large use is made of this method in medicine and especially in psychiatry; but social workers, general sociologists, and educators have also employed it extensively.²¹ Prevailingly the motive is remedial treatment of the individual cases rather than the verification of generalizations about society. But the method has also been used as a basis for asserted or implied generalizations. Indeed in the published descriptions of individual cases, like the *Three Problem Chil-*

¹⁹ Sims, Verner M., *The Measurement of Socio-Economic Status*, 1928.

²⁰ For an example of a well set up and well interpreted study of a single case see Reckless, W. C., "A Sociological Case Study of a Foster Child," *Jl. Educa. Sociol.*, II:567-584 (June, 1929).

²¹ Thomas, W. I., *The Unadjusted Girl*, 1923; Whitley, R. L., "Case Studies in the Boys' Club Study," *Jl. Educa. Sociol.*, VI:17-30 (Sept., 1932).

dren by the Commonwealth Fund investigation or such cases of group behavior as those cited in Park and Burgess' *Introduction to the Science of Sociology*, the implication is carried that there are many other cases like these and hence that the description of the case in hand constitutes substantially a crude generalization about a whole class. The chief weakness of the case study as a method of scientific research, where pure science rather than immediate treatment is the motive, is the smallness of the number of cases customarily employed, and also the tendency to deal with exceptional cases rather than with a random sample of a normal population. The propensity to generalize from an inadequate number of cases, and particularly from some spectacular case, is always strong in the human mind, and the case study technique as customarily handled affords too little safeguards against this tendency. There must be brought to bear upon its generalizations statistical tests of reliability before its findings may be accepted as scientific rather than as impressionistic.

2. *Exact description of an object* is illustrated by a census report, giving the number of persons of different age ranges, the number of foreign birth, the number and percentage engaged in each of several occupations, the distribution as to habitat, by marital status, by sex, etc. A school survey, or a social survey of a community in quantitative categories, is also an example of it. Such studies relating more specifically to educational matters are illustrated by the present author's surveys of the cultural status of various occupational groups in Ohio and those by Hackenberg on cultural status²² and by Smith on citizenship, working under the direction of the author, in Pennsylvania. Such descriptions when well done employ score cards, map locations, and mathematical counts of individuals under particularized categories.

3. *Correlation between arrays presumably related* in order to test the actuality of the supposed connection, or the extent of the overlapping. Almack used a correlation technique in order to determine what are the qualities that get one selected by his fellow pupil for leadership.²³ Among other procedures he ascertained the degree to which the choices of pupils fall upon leaders similar to themselves. He found between leaders and those who voted for

²² Peters, C. C., *Foundations of Educational Sociology*, Rev. Ed., 1930, Ch. XIX.

²³ "Efficiency in Socialization," *Amer. J. Sociol.*, XXXI:241-249 (Sept., 1925).

them coefficients of correlation of from .50 to .58 in respect to chronological age, .30 to .41 on intelligence quotient, and .31 to .54 on mental age, which showed a tendency of pupils to choose as leaders persons closely resembling themselves. In the notable study of the relative influence of nature and nurture by a committee of the National Society for the Study of Education²⁴ extensive use was made of the correlation technique to settle the question whether life in a good home contributes to measurable intelligence and to measurable academic achievement more than life in a poor home does. In our investigation of the relation of motion pictures to standards of morality we employed the correlation technique to ascertain whether offenses against the mores make for or against the commercial success of a movie.¹⁵ By this same technique vast numbers of studies have been made of the relation of various social, economic, and temperamental factors to academic success and to other forms of success. Where quantitative data are available in both series, the Pearson Product Moment method of correlation can be most effectively used. Where one series is graduated and the other determined in only two categories, biserial- r may be employed. Where both series are known only in two categories—above average and below average, let us say—good use may be made of certain rather simple tetrachoric formulæ.²⁵ The calculation of means in one series for successive categories in the other, and the fitting of any sort of trend curves to the data, are variations of the correlation method.

We shall use as an illustration of the correlation technique a small study we conducted of the personality factors making for success in college teaching. The Dean of the School of Liberal Arts at Pennsylvania State College held in mind one of the "best" teachers in his school and assigned him a rating on a scale of 0 to 10 on each of the twelve traits we shall shortly mention. He did the same with four other "best" professors in turn. Then he got in mind, one after the other, four professors whom he had dismissed or considered for dismissal, and similarly rated them on these traits as they affected the question of dismissal. The Deans of the Schools of Education and of Agriculture did likewise, thus giving us rat-

²⁴ National Society for the Study of Education, *Twenty-seventh Yearbook*, 1928, Parts I and II.

²⁵ Peters, C. C., *Foundations of Educational Sociology*, Ch. XVIII.

ings on twenty professors who were exceptionally good in contrast with 17 who were considered failures. Thus in respect to success these 37 professors fell into two distinct classes—successful and unsuccessful. In respect to each of the twelve traits the scores made a quantitatively graduated series. Between these two series, one dichotomous and the other continuous, we computed biserial- r 's. These show the closeness of connection between each trait in turn and success as a whole, and may consequently be regarded as giving evidence of the relative importance of each trait in contributing toward success. The correlations for the twelve traits, arranged in descending order of size, are as follows:²⁶

Biserial- r 's between scores on each of twelve traits and total success in University teaching

Have good practical common sense.....	.90
Do research.....	.90
Have discipline in the classroom.....	.89
Employ good teaching methods.....	.86
Are energetic (not lazy).....	.83
Have good personalities.....	.81
Are intelligent.....	.69
Have good cultural background.....	.69
Coöperate with business in Industrial, Political, Educational, and Social interests in the community.....	.66
Have thorough training in the subject taught.....	.61
Coöperate with the staff and the administration.....	.50
Emotionally balanced (poised, not easily angered, etc.).....	.47

4. *Controlled experiment* involves manipulating a situation while the investigator observes the outcome. Since with all living objects there would be changes, even apart from the operation of the factor that the experimenter manipulates according to his purpose, it is usually necessary to measure changes in the experimental situation over against those in a control situation like the experimental one in every other respect than the experimental factor. In the area with which the sociologist works experiment is usually rather difficult, since it necessitates manipulation of situations involving human beings. Nevertheless a considerable number of experiments in this area have been conducted. One of these is Anderson's

²⁶ Since we have extreme dichotomies instead of random samples from a total population, it is probable that these correlations are somewhat too high.

Experimental Study of Social Facilitation as Affected by Intelligence.²⁷ With one group of boys having I.Q.'s ranging from 125 to 130 and another group having I.Q.'s from 100 to 105, he set such tasks as working arithmetical exercises, cancelling a's, and sorting marbles of different colors, the members of each group working at certain times alone and at other times together. He found a greater average amount of work done in the collective situation than in isolation by both the bright and the relatively dull groups, and also that the variability was greater under the influence of the group. In quality, achievement was lower in the group and also the variability tended to be less in the "together" situation. Similar experiments on the influence of the presence of spectators have been made by Allport²⁸ and by many others, and there is in the literature of social psychology a considerable aggregate of experiments on motivation and on other themes. This academic year 20 controlled experiments are being conducted by Penn State Graduate Students on the question whether moral conduct can be affected by systematic efforts to teach morality.¹⁶

Frequently, especially in sociology, we have comparisons between the end results of the operation of a certain experimental factor and a control situation not containing this factor without any definite manipulation of the situation by the investigator. This is the case, for example, in the study now being completed of boys' clubs by Whitley. We may be obliged to be satisfied with such experimental comparisons of end results, but the findings are less dependable than when we can be sure of precise matching at the beginning and of close parallelism of attendant conditions as the experiment proceeds.²⁹

5. *Partial correlation* can sometimes be used as a substitute for controlled experimentation. By the partial correlation technique we hold all supposedly relevant elements in the situation constant by statistical methods except the critical one we are studying, while in controlled experimentation we must make these accompanying conditions parallel for the two groups by actual manipulation of the groups. A very small study of this sort was made by one of the

²⁷ Anderson, C. A., "An Experimental Study of Social Facilitation as Affected by Intelligence," *Amer. J. Sociol.*, XXXIV:874-881 (Mar., 1929).

²⁸ Allport, F. H., *Social Psychology*, 1924, Ch. XI.

²⁹ Whitley, *op. cit.*, *Jl. Educa. Sociol.*, VI:17-30.

author's students, M. E. Butterfield, on the relation between participation in extra-curricular activities and scholarship.⁸⁰ He partialled out the factor of general intelligence and then found a slight positive partial correlation between extent of participation in various forms of extra-curricular activities and scholarship as measured by school grades, showing that of two groups matched for general intelligence those participating in extra-curricular activities could be expected to make higher rather than lower school grades. The partial correlation technique seems to the writer to hold great possibilities for research in educational sociology.⁸¹

6. *Classification of individuals into significant categories* for the purpose of establishing a series of generalizations descriptive of the set. This is illustrated when individual persons or institutions are grouped under each of many categories in a census or other survey, showing that such and such a number and percentage are of a certain age range, are in this or that occupation, are married, etc. Classifications of this type may take endlessly different forms—as many different forms as our different purposes may require. We may assemble with a view to meaningful classification original data, as when we send out a questionnaire to secure facts or opinions regarding each of a series of questions; or we may work over data originally collected for some other purpose, as where we reclassify the army intelligence test scores in order to establish generalizations about the relative mentality of different races. This method of organizing research is obviously of a very general character. Doubtless it would lend itself to subdivision into many subforms, just as, indeed, all of the previously mentioned five also would, but our space here does not permit further analysis.⁸²

7. *Job Analysis.* Educators interested in defining social needs in such fashion as to yield specifications for school curricula have made

⁸⁰ See Peters, C. C., *Foundations of Educational Sociology*, p. 263. For an application of the method of partial correlation to the determination of factors associated with superstition among college students, see Wagner, Mazie E., "Superstitions and Their Social and Psychological Correlatives among College Students," *Jl. Educa. Sociol.*, II:26-36 (Sept., 1928).

⁸¹ Peters, C. C., and Wykes, E. C., "Simplified Methods for Computing Regression Coefficients and Partial and Multiple Correlations," *Jl. Educa. Research*, XXIII:383-93, XXIV:44-52 (May-June, 1931); Chapin, F. S., "Extra-Curricular Activities of College Students," *School and Society*, XXIII:212-216 (Feb. 13, 1926).

⁸² Harap, Henry, "Reading Music Programs Intelligently," *Jl. Educa. Sociol.*, II:419-423 (Nov., 1929); Bader, Louis, "Health and Family Income," *ibid.*, III:102-114 (Oct., 1929).

extensive use of what they have been calling "job analysis." This consists of a variety of procedures by which the detailed elements are isolated that jointly constitute some large area of social efficiency, as political citizenship or vocation. The author has collected concrete descriptions of some 500 "good" and 500 "bad" citizens, and statements of the elements of the job of citizenship as it was perceived by a like number of persons, and has telescoped these into a composite picture of a "good" citizen. This composite picture constitutes a "blue-print" for good citizenship containing some 340 items and sets objectives for the training of citizens in some such fashion as an architect's blue-print sets specifications for the building of a house. Similar analyses were made for four other areas of social efficiency. Various other procedures, such as the analysis of documents for evidences of social needs and the keeping of diaries, have also been employed in the making of such "job analyses." J. Franklin Bobbitt and W. W. Charters have been pioneers in this type of investigation.³³ Frequently in educational studies such estimates have been employed on the relative importance of traits in contributing to teacher efficiency or to other forms of efficiency, on the frequency with which one has had occasion to use certain elements in his training or the value of these when used, or on the rank of studies as to importance from some particular point of view. Examples of such procedure are to be found in the study by Himes on relative utility in biology and of Peters on the relative utility of different units of instructional materials,³⁴ as well as in the study by Charters and Waples on teacher training and Charters and Whitley on secretarial traits.³⁵ Similarly a number of studies have been made to ascertain what books or what courses children like best or the subjects they find most difficult to master.³⁶

Analysis of Concepts Preliminary to Scientific Evaluation

Such quantitative study as we have been describing above would be very haphazard if it were not preceded by a close analysis of

³³ See bibliography under Bobbitt, Charters, and Peters.

³⁴ See bibliography, Cox, Peters and Snedden, *Objectives of Education*.

³⁵ See bibliography.

³⁶ See, e.g., Lee, A. Scott, "Attitudes as a Factor of Teaching in Normal Schools," *Jl. Educa. Sociol.*, 11:232-238 (Dec., 1928).

basic concepts and principles. Before we can have fruitful quantitatively controlled research we must have significant hypotheses to subject to test. Inductive research performs only the function of proving or disproving hypotheses that have appeared theoretically plausible. And the more thoroughly these hypotheses have been analyzed, and the more rigorously they have been subjected to examination on the basis of common sense observation, the more economical and valuable is the inductive research likely to be that tests them. For a quarter of a century Professor David Snedden has been rendering notable service to Educational Sociology by such analysis of basic concepts and principles.³⁷ Nowhere in the literature of education, perhaps nowhere else in any literature, are there to be found analyses equal to his in incisiveness, in frankness, and in penetration into fundamentals. He is bequeathing to young Educational Sociologists a set of hundreds of promising leads the scientific test of which constitutes the greatest challenge for a science of Educational Sociology. It is, however, not at all essential that a *full set* of hypotheses precede inductive research. On the contrary, the healthiest procedure is probably to define certain hypotheses and forthwith subject them to scientific verification, then to follow on from these to others which are perhaps brought to light by those already attacked, or which are likely to profit from the headway made on the prior ones.

Let us say again, in closing, as we said at the opening of this chapter, that *scientific* research is only one form of development needed in Educational Sociology. We must still deal with many principles that we have not yet learned to put into a form to which we can apply the precise measurements required for truly scientific evaluation. With these we must, for the present at least, deal on the basis of as careful general observation as possible. Even more certainly we still need, and likely shall long need, some fundamental philosophical analysis and many genetic (historical) studies.

³⁷ Snedden, David, *Cultural Educations and Common Sense*, 1931.

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BIBLIOGRAPHY

- Bobbitt, Franklin, *Curriculum Investigations*, 1926.
- Burgess, Thomas O., "The Technique of Research in Educational Sociology," *Jl. Educa. Sociol.*, IV:272-278 (Jan., 1931).
- Charters, W. W., *The Teaching of Ideals*, 1927, pp. 44-127.
- Charters, W. W., and Waples, Douglas, *Commonwealth Teacher-Training Study*, 1929.
- Charters, W. W., and Whitley, I. B., *Analysis of Secretarial Duties*, 1924.
- Cox, Peters, and Snedden, *Objectives in Education*, Teachers College Bureau of Publications, 1929.
- Crawford, C. C., *The Technique of Educational Research*, 1929.
- Jordan, Floyd, "Study of Personality and Social Traits in Relation to High School Teaching," *Jl. Educa. Sociol.*, III:27-43 (Sept., 1929).
- Journal of Educational Sociology*:
- September, 1932. Whole number given to describing the techniques employed in the New York University Boys' Club Study.
 - December, 1932. Whole number devoted to discussion of the techniques employed in the Payne Fund Study of the Social Value of Motion Pictures.
 - November, 1933. Whole number to be devoted to controlled experimentation techniques, and giving results of a series of experiments at the Pennsylvania State College on the effect of moral instruction in modifying conduct.
- Kelley, T. L., *Scientific Method*, 1932, Chs. IV-VII.
- Peters, C. C., *Foundations of Educational Sociology*, 1930, Chs. IV, V, XVIII-XX.
- *Motion Pictures and Standards of Morality*, 1933, Chs. II-V, XI-XII.
- Objectives and Procedures in Civic Education*, 1930.
- Peters, C. C., and Rabold, C. N., "How Country Pupils Differ from Town Pupils," *Jl. Educa. Sociol.*, III:297-306 (Jan., 1930).

CHAPTER XII

THE SOCIOLOGY OF RELIGION

AT THE beginning of such a chapter, one had better state what he means by research, since he will need such a definition before he has finished. My definition will be simple. Research is orderly observation on the basis of which it is possible to do discriminating thinking with reference to specific problems. I use the term "discriminating thinking" because I think it includes more than description and analysis. It carries the implication that social researchers do evaluate—at least, I know of none who refrain. The common distinction between research and survey seems to me to be a distinction based only on the degree of the remoteness or immediacy of the problems and the thoroughness with which the observation and generalization is pursued.

My second definition deals with religion. This seems necessary in order to understand what we mean by the sociology of religion. Religion is the expression of the human will to live in the face of the great challenges to *personal existence*: death, the great ventures and hazards of life, and in face of the great corporate wills, social and cosmic, which threaten or further personal realization. In this I would include the "will to seek perfection" which is manifestly present in the highest religions.

In the pursuit of its function religion uses the language of voluntarism. It deals in loyalties to causes and great persons who perform the function of establishing and defining types of belief and behavior and become the focus of group life. Religion makes use of creeds and codes, of symbols and ceremonies, of songs and rituals. Religion calls together people in groups, who engage in all the behavior which is characteristic of groups. These groups often have definite places of abode and participate in the regulations which society imposes upon such agencies. These institutions have a history, they emerge, flourish and decay. It is because religion takes on group manifestations that we can speak of a sociology of religion.

Legitimate procedure in the sociology of religion excludes no procedure which is legitimate in the study of any group in all its features. I suggest five characteristics of a group, each of which suggests its own procedure which will be developed later.

Every religious group has a history. We ought to know how it came to be and how it has behaved in its historic environment.

Every religious group exists in some present community subject to the movements of human populations. Its ecology should be known; this is especially true of a cultural institution like a religious group which is carried by population migrations and is distributed by them.

Every religious group has structure. It may be the group structure of a gang or the Holy Catholic church, of a street front mission or a Fifth Avenue congregation. These structures vary in size and are subject to measurement in terms of space and time.

Every religious group has characteristic behavior whether it be the United States army, the Salvation Army or a Quaker meeting. All these have functions which they try to perform. They have ways by which they seek to define their purposes and determine the conduct of their members.

Every religious group, whether it be the esoteric cult or the Farm Bureau, has purposes which it seeks to carry out. It means something to its members; what it means to individual members is often different from what it means to itself. It is important to know what it means to those who participate in it. But it is supremely important to know how this group seeks to define itself.

Now if these are the salient characteristics of religious groups, what are the legitimate procedures in the study of them; or, in terms of my definition, what are legitimate methods of orderly observation which will enable us to do discriminating thinking with reference to them? I shall divide the discussion into what I call *Informal Procedures* and *Formal Procedures* in research in the Sociology of Religion.

Informal Procedures

Before any one begins the more formal procedures such as the use of historical criticism, case histories, interviews, statistics, and psychological tests, he must develop his exploratory hypothesis. Professor Odum calls attention to the influence of certain philo-

sophical and analogical factors which are bound to play a part. Some of the dominant factors will be the philosophical ideas based more or less on one's past experience. That one does not escape this is shown pretty clearly in the new emphasis on emotion as a factor in human experience which came in Comte's methodology after he fell in love. From that time on he was looking for the emotional factors in human experience.

One's exploratory hypothesis will be very much determined by the analogies of which he makes use in his exploration. For instance the influence of the thought that population distribution was like in many respects plant distribution has been a fruitful and determining thought in much research. The fact that it is liable to lead us astray, if overemphasized, ought not to keep us from following its lead because the analogy becomes so fruitful if rightly used. In the same way, the biological approach which assumes that human beings are like other beings, while if pressed too far may lead us astray, nevertheless since the day of Darwin does enter into our exploration. We assume evolution in spite of all our attempts to be purely objective. In a similar way there enters into our thinking the influence of our anthropological studies which have dealt with the behavior of primitive man. If we have been working in the field of jurisprudence, we are bound to carry its categories over into the field of research.

Our exploratory hypothesis again will be determined by one's ideas about the effectiveness of ideas in determining human behavior. Here although one may postpone ultimate decisions, he is bound to be influenced in the search for ideas by the place which he gives to ideas in social determination.

In all this section, we are trying to say that our approach to any specific problem rests in a body of assumptions and previous generalizations which, while tending to destroy the objectivity of research, nevertheless, further research in as much as they are the source of fruitful hypotheses in observing. In so far as we are conscious of these, they cease to be prejudices and are legitimate resources.

One should not begin a paper like this without recognizing a certain validity in Jehovah's ancient displeasure at the numbering of Israel. Religion deals with certain intangible states of mind. To quote Professor Hocking: "The questions religion deals with

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are not questions which admit local or national answers; Is there some right way of life? How can human beings overcome evil, misery, fear? Can our courage toward the great world be more than animal spirits or a whistling in the dark? What are the ultimate powers or reality of that world? Do they care for us? Is there a career for individual persons beyond what is seen? Is there any deep lying justice in the workings of destiny, here or beyond?"

Any research which is finally to be important for religion will deal with the ways in which religion answers these questions. Psychic research may ultimately become central in the sociology of religion because it deals with the reality of the persistence of the blessed community beyond the grave.¹

Formal Procedures

Let us turn now to the use of certain formal procedures in research in the sociology of religion. Those formal procedures which will be discussed are the following:

1. Definition of problem.
2. Historical criticisms.
3. Interviews—individual and group.
4. Psychological measurements.
5. Case histories and life histories of individuals and communities.
6. Ecological procedure.
7. Statistical procedure.
8. Experimental procedure under observation.
9. The presentation of research as a part of research.

Definition of Problem. In all research there is a necessity of a sharp definition of the problem. No one begins by observing everything which is observable. If one were to study the Dutch churches among the onion growers in South Holland, Illinois, he could not possibly begin with observing everything in sight. One must pass fairly rapidly by a hundred possible phenomena of interest to those phenomena which are of importance. Those phenomena which

¹ Holt, A. E., "Legitimate Fields for Research," *Religious Educa. Mag.*, April, 1928.

are of importance will vary with the problems of the researchers. The Department of Economics at the University of Chicago approaches these onion growers with interests very different from those interested in the Sociology of Religion and this interest determines the whole approach to the field.

Historical Criticisms. Longest in the field of religious research is historical criticism—higher and lower. We have approached the church through its deposit of documents. It is pertinent to point out that in the scriptures we have literature of inner revelation. Life histories, little codes, prayers, songs, personal philosophies and typical persons constitute the most important of documents in religious research. The attempt has been to achieve an objective point of view free from all tendencies to read into the text the presupposition of the critic. Although the methodology of this group of literary scientists is at present of high repute, it does not escape the criticism that the final knowledge of what the library document says rests on a subjective interpretation of the meaning of certain great symbols. Higher criticism has disciplined itself rigorously in the evaluation of documents and the determination of valid evidence, but historical interpretation has varied as it has done its work with a presupposition as to the importance of the political, social or the economic. We may even expect another variation as new emphasis is placed on the psychological.²

Interviews. If it is legitimate to explore the mind of religious people who lived two thousand years ago through their words recorded in documents, it is legitimate to explore the minds of religious people who live in the present by questioning and by keeping a record of what is said. The technique of the interview is not different because the interview focusses on the religious interest. Care should be taken, however, to make certain that the interview really does call forth those expressions of convictions and attitudes which are rightly classed as religious.³

Group Interviews. Group hearings give us a cross section of opinion at any one time. It has been found possible to use ef-

² Deets, L. E., *Religion as a Cohesive Force in the American Idealistic (Utopian) Communities*, University of South Dakota, 1933 (Unpublished MS.).

³ Johnson, F. Ernest, *An International Survey of the Foreign Young Men's and Young Women's Christian Associations*, Association Press, 1931.

fectively group hearings in exploring opinion situations. The value of this lies in the revelation of attitudes shared by a group of people at any given time who act as checks on each other and as a stimulus to each other when they are faced with a proposal which is of interest to them. Every precaution is made to reinforce or check the information gathered at the hearing by library research and personal interview. Verbatim records are kept by the stenotypist which become documentary material and in turn become available for further analysis.⁴

Psychological Analysis. In religious research one encounters the difficulty of knowing the meaning of the language of symbols, ceremonies, creeds and codes. Religion speaks this kind of language and if we cannot understand it our research must be superficial and more or less worthless. Two kinds of research here suggest themselves.

The various psychological tests would reveal certain inner attitudes and the relation of these attitudes. The determination of what proportion of those who say they believe in God also believe in war, and other like investigations, would throw light on the meaning of the God idea in human experience.⁵

But this does not tell us what happens to men under the influence of symbol, ceremony and architecture. In general one can by interview and guide questions test out what happens to people under the influence of moving pictures. If one could get a large series of reports from individuals as to the effect upon them of watching certain types of pictures he would be able to form some conclusion as to the effect of the presentation of such representations upon them. Let a man try the effect upon himself of sitting through a theatrical performance where every scene centers on the sexual and contrast this with the effect of a service at some great

⁴ Lynd, R. S. and H. M., *Middletown*, 1930, Part V.

⁵ Watson, Goodwin B., *Test of Racial Attitudes*, Bureau of Publications, Teachers College, 1927; *Union Test of Ethical Judgment*, Department of Religious Education, Union Theological Seminary, New York, 1927; *Union Test of Religious Ideas*, Department of Religious Education, Union Theological Seminary, 1927; Thurstone, L. L., and Chave, E. J., *The Measurement of Attitude; A Psychophysical Method and Some Experiments with a Scale for Measuring Attitude Toward the Church*, 1929; Watson, Goodwin B., and Spence, Ralph B., *Educational Problems for Psychological Study*, 1930.

church where music, architecture and spoken word all center on the subordination of the human passion to some higher motive and he will come to believe that by widely extended interview he could get some indication of the effect of symbol and ceremony upon people.

In much the same manner as above, religious ideals and symbols seem to have a selective function. People of a certain type seem to respond to certain symbols. One man comes out of a service and says: "That whole service leaves me cold." Another comes out with an equally enthusiastic judgment in favor of the service. There must be reasons. In fact the religious life of a city divides up into groups which are as sharply delimited as the divisions of race. On one end is the Holy Roller; at the other end is the High Church man, equally devoted to his own type and equally averse to joining in the other type. It ought to be possible to segregate and discriminate between these types and to find who are the people to which each type appeals. Such a study ought to throw a good deal of light on the whole problem of worship. Such procedure as Mr. Carpenter has used in the study of missions is valuable here.⁶ He kept verbatim reports of mission meetings and studied the people of the mission in all their activities.

Case Histories and Life Histories of Individuals and Communities. An institution may be taken as a case; a community may be taken as a case, likewise an individual. In developing a case history the test of adequacy is the test of organic sequence. Do the parts fit into each other in sequence relationships? Do the different events seem to be related to each other in a way that one anticipates another? When all the parts are put together does one recognize a completed picture? Does the behavior fall into understandable sequence? Mr. Kincheloe has made use of the case history in the study of individual churches. We have made a great deal of use of life histories gathered by Mr. Boisen in his work with the mentally distressed at the hospital. It is his theory that when people are in distress they reveal themselves and in those revelations it is possible to see the secrets of the motivation of human lives. In choosing the case to be studied validity centers on

⁶ Carpenter, Thomas P., *The Natural History of the Gospel Mission*, Chicago Theological Seminary, 1933 (Unpublished MS.).

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whether the case is representative so that in understanding it one may feel that he is understanding a larger group.⁷

In good religious research it is necessary to see the way individual, institutional and community experience interlock and must be understood together. This statement from an eminent psychiatrist shows in a remarkable way this interrelationship and is a charter for personal institutional and community study in order to secure an adequate picture:

In studying the etiological factors in the psychoses the physician has to consider not only the material sources of satisfaction available in the environment, but all possible sources of satisfaction which may help the individual toward a healthy equilibrium. On the one hand we may have the satisfaction which comes from the economic life, from friendly social contacts, from recreation and cultural enjoyments and on the other hand we may have the satisfaction that comes from a philosophy of life or religious outlook which stimulates and consoles the individual even when the other sources of satisfaction tend to run dry.

The extent to which this spiritual source of satisfaction is available, the various avenues through which the individual can arrive at it, the circumstances which favor or discourage its utilization are factors which touch the mental health of the community very closely.

In reviewing the mental hygiene facilities of a community a very valid subject of study would be a review of the religious organizations, the extent to which this contact is utilized by the community, the extent to which the organizations feel responsible for more than an established worship and associated practices, the extent to which the religious organization reaches out into the community, the extent to which it takes responsibility for educational standards and for social practices. The material which one might utilize for such study might be partly a statistical review based upon the available data in relation to religious denominations, but more important would be the specific review of individual cases and a thorough analysis of the contact of the patient with a religious organization and of the extent to which that might have been utilized and of the attitude which the religious advisor might have toward the situation.

In cases of affective psychoses, in schizophrenic conditions, in the psychoneuroses, in cases of atypical personality, in the alcoholic psychoses, what were the facilities available for satisfaction from this source, how far were they utilized, how far is the importance of these

⁷Kincheloe, Samuel C., "The Behavior Sequence of a Dying Church," *Religious Educa.*, April, 1929; Hartshorne, Hugh, and Miller, J. Quinter, *Community Organization in Religious Education*, 1932; Holt, A. E., "Case Method and Teaching at the Chicago Theological Seminary," *Religious Educa.*, XXIII:207-212 (Mar., 1928); "Case Records as Data for Studying the Conditioning of Religious Experience by Social Factors," *Amer. J. Sociol.*, XXXII:227-236 (Sept., 1926).

factors in concrete life situations appreciated? These are some of the problems that occur to me.⁸

Ecological Analysis. When one uses the ecological approach he employs the analogy of plant distribution and the distribution of human populations. This distribution is spacial and temporal and such facts can be revealed first by the statistical data which show the distribution of populations and the cultural phenomena which move with populations.

The value of such research lies in its revelation of the close identification of religious groups with contemporary social movements. This is illustrated by a map of India which shows the close approximation of the distribution of the great religious cultures and the population migrations which have taken place. A similar relationship is seen in what the suburban trend does to churches. Some churches are caught up on the high crest of a population wave and carried to success; some are dragged in the other direction; the causes are not theological but social.⁹

Statistical Procedure. The statistical method has been in use in religion ever since David numbered Israel and thereby incurred the displeasure of Jehovah. It can determine time and space relationships, all relations which have to do with quantity. It is especially of value in studying the structure of the church. Financial studies are, of course, statistical studies. All membership studies are statistical. Statistical maps which determine the location of members and the general distribution of religious groups are very valuable. A good illustration of the use of the statistical method in a financial investigation is found in Mr. Giersbach's

⁸ Campbell, C. Macfie (from an unpublished document); see also Boisen, A. T., "The Problem of Values in the Light of Psychopathology," *Amer. Jl. Sociol.*, XXXVIII:51-63 (July, 1932); "The Sense of Isolation in Mental Disorder," *Amer. Jl. Sociol.*, XXXIII:555-567 (June, 1928); "Personality Changes and Upheavals Arising out of the Sense of Personal Failure," *Amer. Jl. Psychiatry*, Apr., 1926, pp. 531-551; "The Psychiatric Approach to the Study of Religion," *Religious Educa.*, XXIII:201-207 (Mar., 1928); Leuba, J. H., "Study in the Psychology of Religious Phenomena," *Amer. Jl. Psych.*, VII:309-385 (1896); *Psychology of Religious Mysticism*, 1926; Starbuck, E. D., "A Study of Conversion," *Amer. Jl. Psych.*, VIII:268-308 (1897).

⁹ Wooster, T. J., Jr., *Negro Problems in Cities*, 1928; Holt, A. E., "Mobility and Religion," *Religious Educa.*, October, 1928; Douglass, H. Paul, *The Church in the Changing City*, 1927; *Church Comity; A Study of Coöperative Church Extension in American Cities*, 1929; *1000 City Churches*, 1926; *Protestant Coöperation in American Cities*, 1930; *The St. Louis Church Survey; A Religious Investigation with a Social Background*, 1924; Hallenbeck, Wilbur C., *Minneapolis Churches and their Comity Problems*, 1929.

study of the receipts and expenditures of four major denominations in Chicago. For ten years the Institute of Social and Religious Research has developed and made effective use of the statistical method in the study of American religious groups.¹⁰

Experimental Method. The valid experiments in religion are outdoor experiments and in general they are long time experiments. Such communities as the Amana community in Iowa or the Dutch Reformed communities in the southern edge of Chicago are long time experiments which yield a solid basis of knowledge if their experience is systematically recorded. Again it is possible to watch institutions grow under treatment as it is possible to watch individuals under treatment. Chicago has several so-called "inner city churches"; no one knows how such churches ought to proceed, but it is possible to get a record of how they have behaved, as Mr. Kincheloe has done; it is possible to keep a month by month record of what they are doing, and it is possible to get at intervals a record of what they have accomplished. Thus the church becomes an outdoor experiment, not unlike an observed farm under the field department of an agricultural college; whatever the church does is of interest provided one knows what it has done.

Presentation of Research as a Part of the Process of Research. The presentation of the results of research to interested groups is often looked down upon as unworthy of the interest of those who are engaged in research. It may, however, be a corrective to academic bias. It may be a way of discovering realities in the situation of which account must be taken. When an interested group is faced with the results of research the occasion takes on the characteristics of a group hearing. There results a cross section of the controlling opinion of the group which is a distinct contribution to the information which is a part of the situation. If the information is valid it may well modify the conclusions arrived at by the research group.

¹⁰ Hartshorne, H., and May, Mark A., *Studies in Deceit*, 1928; Hutchinson, Carl, *The Religion of 200 Farmers in McHenry County, Illinois*, Chicago Theological Seminary, 1928 (A mimeographed monograph); Hartshorne, Hugh, *Community Organization in Religious Education*, 1932.

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BIBLIOGRAPHY*

- Beers, Howard W., "Suggestions for a Sociological Analysis of the Rural Church," *Pub. Amer. Sociol. Soc.*, XXV:10-17 (1931).
- Brunner, Edmund de S., "Sociological Significance of Recent Rural Religious Surveys," *Amer. Jl. Sociol.*, XXIX:325-337 (Nov., 1923).
- Cavan, Ruth Shonle, "Research Projects in Religious Education," *Jl. Religious Educa.*, XXIII:376-387 (Apr., 1928).
- Chaffee, Grace E., "An Isolated Religious Sect as an Object for Sociological Research," *Amer. Jl. Sociol.*, XXXV:618-631 (Jan., 1930).
- Douglass, H. Paul, *How to Study the City Church*, 1928.
- Faris, Ellsworth, "Some Phases of Religion that are Susceptible of Sociological Study," *Pub. Amer. Sociol. Soc.*, XXIII:342-343 (1929).
- Fisher, Galen M., "Current Research in the Field of the Sociology of Religion," *Amer. Jl. Sociol.*, XXXV:163-170 (July, 1929).
- Holt, Arthur E., "Case Records as Data for Studying the Conditioning of Religious Experience by Social Factors," *Amer. Jl. Sociol.*, XXXII:227-236 (Sept., 1926).
- Watson, Goodwin B., *Experiments in Measurement in Religious Education*, 1927.

*This bibliography was furnished by Earle E. Eubank. See Part I, Ch. XII.

CHAPTER XIII

CRIMINOLOGY

CRIMINOLOGY is a term which, in a general way, has been used to designate the study of the problem of crime. Within the boundaries of this science, inquiries and investigations of the most varied nature have been conducted. Some criminologists have centered their attention on the law, which defines crimes and penalties and provides rules for the application and the execution of penal treatment. Others have been interested in ascertaining the frequency, the character, and the trends of crime in given communities. Others have observed the nature and have analyzed the functioning of the numerous agencies created by the state to deal with offenders. Still others have been chiefly concerned with the study of the offenders themselves and of the social environment or conditions which constituted the setting of their activities. They have tried to describe as accurately as possible the social phenomena they have observed, and wherever possible they have attempted to formulate generalizations accurately expressing what they believed to be the interdependent and relatively constant relationships existing between the criminal and his world. During their investigations they have made use of every applicable method, device, or technique known to science. In the interpretation of their data they have been deeply influenced by the general intellectual atmosphere in which they have been reared, although this is frequently ignored by those who evaluate criminological research without giving due consideration to its historical setting. Finally, the character of their own scientific education has determined their approach to criminological study.

A discussion of methods of research and sources of data involving so wide a field as criminology would require considerable space, and etiological research will therefore be given chief consideration. Among those who have been engaged in researches into crime causation we can distinguish at least those with biological, those with psychological or psychiatric, and those with social science training.

The Biologists

The biologists were probably the first to study criminals. Interested as they were in solving the question of the general relationship between behavior and the organic structure and function of man, they were naturally led to a study of criminal behavior which seemed to represent especially aggravated deviations from the norm. Furthermore, after imprisonment became a popular form of punishment, criminals were easily available for study. This availability of laboratory material has had important bearings on all etiological research in criminology.

Historically speaking, some of the earliest biological theories¹ of criminal behavior may be traced to the ancient Greek physiognomists; and studies of criminals in this connection seem to have been carried out as early as the sixteenth century, when Della Porta furtively subjected the executed criminals of Rome to anatomical examination and presented his data in a manner curiously similar to that recently employed by Stockard.

With Franz Josef Gall (1758-1828), scientific method in criminology may be said to have been established. In his study of the anatomy and the physiology of the nervous system, this much misunderstood, underrated, and maligned scholar drew heavily on data secured through examinations of dead criminals and living prisoners, particularly murderers and thieves. Gall's work probably proved a great inspiration to contemporary psychiatrists who were formulating the hypothesis of moral insanity; it gave the basis for the theory of biological degeneracy advanced some decades later by Morel and provided the backdrop for Lombroso's tempestuous and invigorating performance on the scientific stage of the eighties.

Cesare Lombroso was the most famous of the biologists engaged in the study of the crime problem. In undertaking to portray the anatomical and functional peculiarities which in his opinion placed a large proportion of criminals apart from their fellow humans, he relied on personal examinations of prisoners, conducted in the best tradition of Gall, but with better material equipment and in an age intellectually reborn by the work of a Darwin. Lombroso's studies

¹ See Antonini, G., *I Precursori di Lombroso*, Turin, 1900.

called into being a whole movement in criminological research, international in scope and influence.² While some of his specific theories of causation have been demolished, we owe to his influence a number of new departures in the study of criminal etiology. The flourishing researches carried on today in the prison laboratories of Belgium, Bavaria, Austria, Saxony, Prussia, and his own Italy are conducted almost entirely on the basis of biological hypotheses.

The biologists, regardless of their specialized interests—the geneticists, the “constitutional” biologists, the endocrinologists, etc.—have been men of medical training. It is therefore natural that in their study of the criminal they should have relied chiefly on direct examination. With the aid of every test or measurement known to their science, the biologists have definitely established the principle that the causes of crime should primarily be sought in or through the criminal, a principle which is now generally accepted by criminologists.

The Psychologists

The psychologists that have been concerned with the study of criminal behavior have been interested in the mental functions of criminals as compared with “non-criminals.” If we include here the psychopathologists, it is only for convenience, for until relatively recent years, this group could with equal justice be placed with the biologists.

Psychiatrists have for over a hundred years been concerned with criminal behavior. They were drawn into the study of criminals as a result of their general experience with mental disorders and particularly through the aid they had to lend the courts in determining questions of moral responsibility for crime. Their theory of moral insanity, formulated by Esquirol, Pritchard, etc., in the first half of the last century, still has adherents, though a host of other explanations of criminal conduct have since been advanced by them. Like the biologists, they have relied on direct observation and examination for their diagnosis.

Until recent years, the psychologists have approached the study of crime largely through the study of intelligence. The introduc-

² The best source for the study of the methods used by the criminal anthropologists in general and of the battles fought over Lombroso's theories are the proceedings of the seven International Congresses of Criminal Anthropology held between 1885 and 1912.

tion of objective tests of mental functions gave rise to a long series of researches with a view to ascertaining possible differences in speed and quality of mental reactions to these tests on the part of criminals as compared with non-criminals. With the growth of this movement the tests have not only been improved, but their limitations have become recognized. Both psychiatrists and psychologists have in late years been experimenting in a restricted way with psycho-analytic techniques of study.

The Social Scientists

The social scientists have been interested chiefly in the study of the social environment of the offender. The belief that social conditions generate crime is of old standing. The literature of the last two centuries is replete with explanations of crime causation in terms of political tyranny, poverty, illiteracy, immigration, social maladjustment, etc. Statisticians like Quetelet and Guerry tried to demonstrate some of these relationships scientifically. Their method seemed full of promise and became widely adopted in sociological studies of crime. The pioneers were again Europeans, like Ferri, Colajanni, Tarde, Bonger, etc. Since the turn of the century the sociological approach to criminology has reached a higher development in the United States than elsewhere. American sociologists have been especially interested in the study of the influence of family and neighborhood culture on the development of personality. The presence of large and diverse race and immigrant groups in our population has put its stamp on their work. The concept of culture conflict so frequently heard in discussions of crime causation quite properly belongs to the American scene.

This all too brief summary has insufficiently stressed the interdependence of the various approaches discussed. While there have been a number of so-called monogenetic theories of crime causation, most scholars have recognized the validity of approaches other than theirs. Even Lombroso wrote many articles on social causation and devoted to it a whole volume of the last edition of his book on the "criminal man." Social scientists today usually grant the necessity of studying the criminal as a whole and of taking into account both organic and psychological factors in their relation to personality development and its forms of expression in given situ-

ations. The tendency today is strongly toward a synthesis of the various approaches to etiological research. Of course, so long as the criminologist does not possess the general training afforded by all the disciplines here discussed, his particular scientific bias will naturally appear in his work.

Methods of Study

In the study of the etiology of crime, the criminologist has used methods and techniques borrowed from other sciences. One of these methods of investigation can perhaps be called the *diagnostic* method, designed to lay bare the causes of the criminality of the individual offender. The divergent and preconceived causal hypotheses of the users of this method have determined the direction of its use, as well as the techniques devised for its application. Criminologists of biological bias have centered their examination on the offender's anatomy and organic constitution and functions,³ the psychologists and psychiatrists on his mental processes,⁴ and the sociologists on his social personality,⁵ on the assumption that some definite relationship exists between these complexes of factors and criminal conduct. At times the diagnostician has sought the aid of measurement as a means of objectifying his examination. Anthropometrical measurements have been extensively used by the

³ A brief summary of the researches of the 19th century may be found in Quiros, C. B., de, *Modern Theories of Criminality*, 1912. See also Lenz, A., *Grundriss der Kriminalbiologie*, Vienna, 1927; the three volumes so far published of the proceedings of the *Kriminalbiologische Gesellschaft* for details containing recent researches in Italy, Bavaria, Saxony, Austria, Belgium, Lettonia, and Russia. The best survey of the endocrinological researches in crime causation is that of Ruiz-Funes, M., *Endocrinología y Criminalidad*, Madrid, 1929. The work of the penitentiary anthropological service in Belgium is described in detail by Petrzilka, W., *Persönlichkeitsforschung und Differenzierung im Strafvollzug*, Hamburg, 1930, and Rabinowicz, L., *La Lutte Moderne Contre le Crime*, Brussels, 1930. In the United States the use of the diagnostic method in the biological study of the criminal has never dominated research.

⁴ See Healy, W., *Mental Conflicts and Misconduct*, 1917, and his *Pathological Lying, Accusation and Swindling*, 1915. Also Karpman, B., *Case Studies in the Psychopathology of Crime*, 1933; Briggs, V., *The Manner of Man that Kills*, 1921; Southard, E. E., and Jarrett, M. C., *The Kingdom of Evils*, 1922; Bjerre, A., *The Psychology of Murder*, 1929; Alexander, F., and Staub, H., *The Criminal, the Judge, and the Public*, 1931; and the *Case Studies*, published by the Judge Baker Foundation, Boston, 1922-1923.

⁵ See Thomas, W. I., *The Unadjusted Girl*, 1923; Shaw, C. R., *The Jack-roller*, 1930, and his *The Natural History of a Delinquent Career*, 1931.

biologists, intelligence tests by psychologists, and attitude and personality tests by sociologists.

In the cross-sectional diagnosis, which secures data concerning the offender at the moment of his examination, there has frequently been incorporated a genetic study of the offender's biological history⁶—heredity, for instance—or of his social history. In connection with the latter approach considerable use has been made in recent years of the so-called autobiographical life history technique.⁷

The importance of the genetic approach cannot be overestimated in etiological research; it is an indispensable part of the diagnostic method. That method is *a priori* the only one which can be expected to reach the roots of the criminality in the individual offender. It is therefore the only method than can indicate which remedial or preventive measures should be applied in his case. Criminology has not reached such development that it is possible for the criminologist to analyze the causes of an individual's criminality with such certainty that if remedial measures indicated by the diagnosis were applied, the conduct disorder would disappear. This limitation is due to ignorance of the mechanisms of human behavior. The criminologist, even when he observes the most rigorous care in his researches, can hardly rise higher than the level of those sciences from which he borrows his methods, his techniques, and his preconceptions. Like his fellow students in those sciences, he is an explorer who hopes that his work will help to extend the boundaries of knowledge.

Another method of study has been prominently utilized in etiological research. For want of a better term we may call this the *method of comparative statistical analysis*. It is obvious that the investigator using the diagnostic method has always arrived at his conclusions on the basis of comparisons with his prior knowledge of other offenders; but, while the diagnostician has attempted to discover the causes of an *individual's* offense, the one who uses the method of comparative statistical analysis has been interested in arriving at relationships between mass phenomena. His data have consisted of statistical descriptions of crime, criminals, non-criminals, and their social environment. Observing with care the

⁶ See the recent work abroad mentioned in footnote 3. Also Lange, J., *Crime and Destiny*, 1932.

⁷ See the studies by Shaw already mentioned.

basic canons of statistical analysis (this he has frequently failed to do, however), he has compared groups of criminals with other groups, criminal or non-criminal, in order to discover distinguishing differences;⁸ he has compared the incidence of certain traits or combinations of traits in the criminal's environment with the incidence of the same traits in the environment of non-criminals;⁹ and he has compared the trends of crime in general or of specific types of crime with the trends of certain social phenomena.¹⁰

Such investigations, and particularly those based on large numbers of individuals studied by the diagnostic method, may be expected to be of increasing value in etioloical research. They have furnished the diagnostician with a background for his work; and have indicated to him problems for more intensive investigation. They are, furthermore, necessary for the verification of the validity of causal hypotheses or of remedial or preventive measures, particularly since specific crime causes have not as yet been discovered and, in the opinion of many (probably most) criminologists, may never be found.

The Sociologist and Criminological Research

The sociologist should be able to throw light on the social processes which condition criminal conduct. He would thus aid in

⁸ See Goring, C., *The English Convict*, London, 1931; Lund, D., *Über die Ursachen der jugendlichen Asozialität*, Uppsala, 1918; Slawson, J., *The Delinquent Boy*, 1926; Burt, C., "The Causal Factors of Juvenile Crime," *British Jl. Med. Psych.*, III:1-33, 1923; Root, W. T., *A Psychological and Educational Survey of 1916 Prisoners in the Western Penitentiary, Pittsburgh*, 1928; and Murchison, C., *Criminal Intelligence*, 1926. An anthropological study of vast proportions conducted by E. A. Hooton is nearing completion. For a survey of researches into the relationship of feeble-mindedness to crime, see Sutherland, E. H., "Mental Deficiency and Crime," in Young, K., (ed.), *Social Attitudes*, 1931.

⁹ See Shaw, C. R., "Correlation of Rate of Juvenile Delinquency with Certain Indices of Community Organization and Disorganization," *Pub. Amer. Sociol. Soc.*, XXII:174-179 (1928), and his *Delinquency Areas*, 1929.

¹⁰ See Thomas, D. S., *Social Aspects of the Business Cycle*, 1927; Winslow, E. A., "Relationship Between Employment and Crime Fluctuations as Shown by Massachusetts Statistics," in National Commission on Law Observance and Enforcement, *Report on the Causes of Crime*, 257-312, Washington, 1931; Woytinsky, W., "Kriminalität und Lebensmittelpreise," *Zeits. f. die ges. Strafrechtswiss.*, XLIX:647-74, 1929; and Roesner, E., *Der Einfluss von Wirtschaftslage, Alkohol und Jahreszeit auf die Kriminalität*, Berlin, 1930. A survey of the older literature on economic conditions and crime may be found in Bonger, W. A., *Criminality and Economic Conditions*, 1916.

providing a basis for planned social action designed to inhibit or prevent such conduct. It is on questions of this nature that he has hitherto centered his interest. He should also—in its substantive and adjective forms and in its application—study the law as a social institution and aid in formulating the principles, which in the light of his researches might receive legal expression. He should study the agencies of penal treatment in their social growth, their adaptation to purpose and their effectiveness as legal instruments. And, finally, he should test the efficacy of preventive measures designed directly or indirectly to modify the expression of crime. His field of activity is therefore of considerable breadth, and while he has in the past expended great energy in the study of many criminological problems, he has left others almost untouched. Of the latter, some are in need of more intensive exploration.

Criminal legislation in the United States indicates the presence of a wide divergence of ideas with regard to the severity of crimes and the aims and means of penal treatment. Penalties vary greatly in kind and severity from state to state within the same culture area. Modern ideas of reformative treatment have found acceptance, side by side with traditional punishments. Practically no studies¹¹ have been made to show the distribution and the strength of these ideas in the political area governed by a given code of law. Such studies in various sections of the country and in each section covering the attitudes of various age, race, and occupational groups, for instance, would yield knowledge of the greatest value to the sociologist and to the legislator, to the latter for the purpose of adjusting law to public opinion, to the former as an aid in establishing the degree of coincidence between legal codes and codes of asocial conduct.

The criminologist faces a whole field of research within the framework of the law. The law, for instance, has certain expressed or implied aims, which those who apply or execute it are supposed to secure by adapting penal treatment to prisoners as individuals. The criminologist should study the prisoner in the penal situation in order to acquire knowledge concerning such questions as the general or specific effects of various forms of penal treatment, and

¹¹ A recent example is Kelchner, M., *Schuld und Sühne im Urteil jugendlicher Arbeiter und Arbeitinnen*, Leipzig, 1932.

the destructive and constructive influences of human relations within the framework of that treatment.¹²

A number of studies have been made of the administration of criminal justice, but the field of what might be regarded as forensic sociology has hitherto remained almost entirely unexplored. The courtroom is a microcosm where social conflicts, prejudices and preconceptions play a rôle in the social interactions of those within its walls. Sociological studies of the judicial process, for instance, would not only have criminological but general sociological value.¹³

There is a vast amount of energy and wealth expended in carrying through this or that program or policy of social amelioration in general, or crime prevention, in particular. Studies are needed which attempt to measure the value which these programs possess as crime preventive factors. So far only a slight beginning has been made along such lines of research.¹⁴

Criminologists should coöperate in the development of uniform basic records in order to secure comparative data susceptible of comparative analysis. Reliable indexes to crime conditions in specific communities are needed, for without them studies of correlation between crime and social factors and tests of the effectiveness of broad penal and preventive policies are impossible. For these reasons aid, advice, and encouragement should be given to the development of national statistics of crimes known to the police, which are likely to furnish the best basis for such indexes.¹⁵

A number of agencies in this country are also objectifying by statistics the administration of justice and penal treatment and the characteristics of the individuals who pass through courts or insti-

¹² See Gehlke, C. E., "Testing the Work of the Prison," *Annals Amer. Academy Polit. and Soc. Sci.*, CLVII:121-30 (Sept., 1931). An intensive study of the relationship of parole success to penal treatment is that of Glueck, S. and E. T., *500 Criminal Careers*, 1930. See also Burgess, E. W., "Factors Determining Success or Failure on Parole," *Jl. Crim. Law and Criminology*, XIX:239-286 (May, 1928); and Vold, G. B., *Prediction Methods and Parole*, 1931.

¹³ These questions have been but lightly touched by the various state and local crime surveys of the last decade. A pioneer statistical study is Exner, F., *Studien über die Strafzumessungspraxis der deutschen Gerichte*, Leipzig, 1931. An interesting study by F. J. Gaudet, on the basis of judicial statistics, is awaiting publication in the *Jl. Crim. Law and Criminology*.

¹⁴ A study of the influence of boys' clubs on delinquency in the areas they serve is nearing completion under the direction of F. Thrasher.

¹⁵ See Sellin, T., "The Basis of a Crime Index," *Jl. Crim. Law and Criminology*, XXII:335-56 (Sept., 1931).

tutions. Here, again, there is an arduous task awaiting the criminologists, for they, in particular, should know what data should be gathered and how they should be tabulated and analyzed to provide a maximum of useful information for comparative study. Since the raw material for such data, as they affect prisoners at least, is secured without much check on the prisoner's veracity, studies in various sections of the country are needed to determine the proportion of errors in such unverified information.¹⁸ This is particularly important as a guide to those who are designing uniform plans for national crime statistics.

Every effort should be made to refine and improve methods and techniques of research. With the possible exception of the penologists, relatively little use has been made by criminologists of the historical approach to crime questions. Historical perspective is needed for the understanding of our own problems and nothing is better suited to give tolerance and understanding than is knowledge of the attempts already made to meet the questions which are facing us. Our own researches would often lose the importance or the novelty we attach to them were we to look into the past. These gaps in our historical knowledge should be filled or narrowed.

No one realizes the difficulties in the study of crime better than those actually engaged in such a study and no one is more aware than they of the deficiencies in their methods and the weaknesses of their conclusions. This is no reason for discouragement, however, but a challenge to raise standards of work and to coöperate in the development of future research. There have always been too many poorly formulated research projects, conducted in ignorance of what has been done or is being done elsewhere; too many publications which show ignorance of scientific method and a lack of general background on the part of the author. This is not a situation peculiar to criminological research, but common to all fields of knowledge, even though it is perhaps more frequently encountered in the social than in the other sciences.

¹⁸ Such a study has been recently completed by E. H. Sutherland.

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BIBLIOGRAPHY

- Bonger, W. A., *Inleiding tot de Criminologie*, Ch. I, Haarlam, 1932.
- Burgess, E. W., "The study of the delinquent as a person," *Amer. Jl. Sociol.*, XXVIII:657-80 (May, 1923).
- Burt, C. L., "Scientific methods of studying the offender," *The Young Delinquent*, Ch. I, 1925.
- Carrara, M., "Über die Methodologie der anthropologischen Untersuchungen der Verbrecher," *Mitteilungen der Kriminalbiologischen Gesellschaft*, II:65-73, Graz, 1929.
- Grispigni, F., "Il Metodo," *Introduzione alla sociologia criminale*, Ch. II, Turin, 1928.
- Healy, W., *The Individual Delinquent*, Chs. V-IX, 1915.
- Lenz, A., et al., "Die vergleichende Untersuchung der Persönlichkeiten," *Mörder*, Part II, Moyer, Graz, 1931.
- Michael, J., and Adler, M. J., "Criminology," *Crime, Law and Social Science*, Part II, 1933.
- Rice, S. A., ed., *Methods in social science: A case book*, 1931. (Especially analyses Nos. 36, 37, 39, 41, 49, of the methods used by W. Healy, F. W. Thrasher, J. Slawson, C. Burt, C. R. Shaw, and D. S. Thomas.)
- Shaw, C. R., "The Cultural Approach to the Study of Delinquency," *Delinquency Areas*, Ch. I, 1929.
- Smith, M. H., *The psychology of the criminal*, Chs. II-IV, London, 1922.
- Sutherland, E. H., "Causes of Crime: General," *Criminology*, Ch. IV, 1924.
- "The prison as a criminological laboratory," *Annals Amer. Acad. Polit. and Soc. Sci.*, CLVII:131-136 (1931).
- Thomas, W. I. and D. S., "The Methodology of Behavior Study," *The Child in America*, 1928, Ch. XIII.
- Viernstein, T., "The Crimino-Biological Service in Bavaria," *Jl. Crim. Law and Criminology*, XXIII:269-275 (July-Aug., 1932).



CHAPTER XIV

FAMILY STUDY

FOR purposes of this chapter it appears desirable to consider the problems of securing and analyzing data in regard to family life, first by the method of statistics, second by the method of case-study, and third by the interrelation of these two methods. The objectives of family research are: (1) to obtain a clear and accurate description and analysis of the family in diverse ecological and cultural settings, (2) to chart and to account for the changes and trends in the family taking place in space and in time, and (3) to identify, to isolate, and to correlate the basic variable factors in the behavior of the family considered both as a unit of interacting personalities and as a social institution.

Statistical Data and Technique

Family data susceptible to statistical treatment may be divided into two large divisions: first, materials already available to the research worker, and second, materials which he must secure at first hand. Census data on marriage and divorce, quantitative studies of records of family welfare agencies, and other statistical data which also have a public interest are already available. Lichtenberger's¹ and Cohen's² studies of divorce are presentations and analyses of census data, while Brandt's,³ Eubank's,⁴ and Colcord's⁵ studies of desertion utilize materials from case records of social agencies.

The most important body of statistical data on the family is that obtained by the United States Bureau of the Census. The inclusion in the last census of the family card providing for the tabulation,

¹ Lichtenberger, J. P., *Divorce, a Social Interpretation*, 1931.

² Cohen, Alfred, *Statistical Analysis of American Divorce*, 1932.

³ Brandt, Lilian, *Five Hundred and Seventy-Four Deserters and Their Families*, 1905.

⁴ Eubank, E. E., *A Study of Family Desertion*, 1916.

⁵ Colcord, J. P., *Broken Homes*, 1919.

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for the first time, of the composition of the family in detail, classification of families by number of gainful workers, value of homes owned and rents, types of families and other new data was a great movement forward.⁶ Statistics of marriage and divorce for the United States by states and counties are available in printed reports from 1867 to 1930, with the exception of the years 1907-15 inclusive and 1917-21 inclusive. They show a divorce rate for 1870 of 28 per 100,000 population, reaching a peak of 166 per 100,000 population in 1929 and receding to 156 per 100,000 in the first year of the depression (1930).⁷

How complete and accurate are these figures for marriage and divorce cannot be definitely stated. Dwight Sanderson for four counties in New York and Kimball Young for one county in Wisconsin show that the number of divorces reported to the Census Bureau is much below the actual number of divorces granted. For Cook County, however, Ernest R. Mowrer for 1919,⁸ and Johannes Stuart for 1930,⁹ found no discrepancy between the number reported by the census and the number of divorces granted.

Many family data accumulated by other agencies are not so readily accessible to the research student as census data. The records of family welfare agencies and of child guidance clinics contain increasingly valuable materials upon the economic structure, the psychological interaction, and the social life of the family. Data upon buying habits, purchasing power, and other economic items of family life are being accumulated by survey departments of newspapers and magazines, of public utilities and of other industrial and commercial enterprises but are not easily obtainable or, in fact, generally known to exist. The family data of social welfare agencies and of business enterprises are secured primarily for practical purposes of service and profit, rather than in the interests of scientific research. There are those who assert that these materials will never yield a high rate of return for research purposes.¹⁰ On

⁶ See *Population Bulletin: Families, 1932* (by states).

⁷ Bureau of the Census, *Marriage and Divorce, 1930*, p. 15.

⁸ *Family Disorganization, 1926*.

⁹ *A Study of Divorce in Cook County*, University of Chicago Libraries, 1931.

¹⁰ Mary E. Richmond said that social case records had no possible value as data for scientific analysis unless the people who made them were given the time to do original thinking and were capable of such thinking. Two types of original thinking would be essential, however; the original thinking of the worker who made the first-hand contacts, and the original thinking of the research worker who interpreted these experiences. *Proceedings Nat. Conf. Soc. Work*, 1918, p. 693.

the other hand, the claim is made that they have sufficient potential value for research to warrant all possible effort directed toward securing a maximum degree of uniformity on a minimum number of significant items.

For many research projects, perhaps for the most important scientific work, original data must be secured by the research worker himself. The technique of securing, tabulating, and analyzing statistical data is well developed in courses and in textbooks and need not be summarized here. The point, however, may be made that in the interests of family research as a field it is desirable that even the securing of original data be built upon past research and proceed wherever practicable by standardized forms and questions so that findings may be comparable.

Statistical Method in Family Research

The special statistical techniques are well known and common to the treatment of social data in all fields. Accordingly, our attention here will be given to those general methods of presenting statistical materials in a way to increase our store of knowledge on the family and its problems of organization and disorganization. These general methods may be discussed in connection with: (a) classification and enumeration, calculation of rates and construction of indices, (b) distributions, (c) trends, (d) correlations of factors, and (e) prediction.

Enumerations involve only simple statistical procedure. Counts of the annual number of marriages and divorces, data upon the size and composition of families, and upon the marital status of persons of marriageable age, and summary tabulations of birth, marriage and death rates are all elementary but basic family data. These and other enumerations enable us to state and gauge many of the conditions and problems of the family in exact numerical terms. These counts are perhaps even more valuable for the measurement of certain aspects of family life not directly susceptible to observation or analysis. For example, family disorganization cannot be measured directly, but statistics of divorce, desertion,

juvenile delinquency, illegitimacy, prostitution, and mobility provide indices of disorganization.¹¹

Distributions of family data might be included under the head of enumeration and indices. They are given a separate treatment because the method of plotting distributions recognizes the significance of local concentrations and scattering of data. The establishment by the Bureau of the Census of census tracts for cities and of farm areas within counties now makes possible the analysis of census data by differences in its distribution over small local areas. In Philadelphia, Bossard,¹² by plotting residence of 5,000 couples, finds residential propinquity to be a marked factor in marriage selection. In Chicago, given rooming house areas were found by Mowrer¹³ and Stuart¹⁴ to have a higher divorce rate than any state in the union except Nevada, while certain single dwelling residential districts had a lower divorce rate than any state except South Carolina, which has no law permitting divorce. Such differences in distributions show unmistakably the influence of local community factors in family life. They demonstrate the methodological necessity of the recognition of the neighborhood and the community as local units in family research.

The notion of trend implies that the changes taking place in family life are not random but tend to proceed in a certain consistent direction over a certain period of time. For instance, since 1870, the trend of divorce rate in the United States has been almost uniformly upward. The few exceptions can all be explained by the temporary interference of years of economic depression. Among the significant studies using this technique have been those by Dorothy S. Thomas,¹⁵ Maurice B. Hexter,¹⁶ W. F. Ogburn,¹⁷ and

¹¹ In the construction of a mobility index it will be desirable to test out the relationship to family disorganization of factors such as family movement, home ownership, possession and use of automobile, radius of social contacts and communication. These are only illustrations of the many ways in which significant factors in family relationships may be defined, classified, subjected to statistical measurement, and converted into indices.

¹² "Residential Propinquity as a Factor in Marriage Selection," *Amer. J. Sociol.*, XXXVIII:219-24 (1932); also, Marvin, Donald M., *Occupational Propinquity as a Factor in Marriage Selection*, University of Pennsylvania Thesis, 1918.

¹³ *Op. cit.*

¹⁴ *A Study of Divorce in Cook County*, Master's thesis in University of Chicago Library, 1931.

¹⁵ *Social Aspects of the Business Cycle*.

¹⁶ *Social Consequences of Business Cycles*, 1925.

¹⁷ *Recent Social Trends in the United States*, Ch. XIII, 1933.

John Dollard.¹⁸ The studies by Thomas and Hexter show correlation of trends of marriage and divorce with the economic cycle. The studies by Ogburn and by Dollard follow the method developed by the former of securing indices for the changes taking place in the historic functions of the family, namely, in health, economics, protection, recreation, affection, and education.¹⁹

Enumerations, indices and data on trends of family behavior all present possibilities of statistical correlation. Through the method of correlation it is hoped to bring order out of the apparent chaos of factors conditioning and determining human behavior. In the field of the family it is necessary to consider first of all the personality traits of its members both biologically and culturally conditioned, their rôles in family interaction, which may be influenced by their order of birth and the number of children, and their conceptions of family life in relation to the standards and traditions of the community.

The objection is repeatedly made that individuals are so different and social situations are so varied that adequate descriptions or control of the causative factor are impossible. The methodological problem of demonstrating that this alleged complexity of social phenomena is perhaps more apparent than real appears to have been solved by L. L. Thurstone. He has devised a method of intercorrelation by which the many apparent factors or symptoms may be reduced to a few basic factors, or clusters of symptoms. These basic factors may then be dealt with independently by the methods of multiple and partial correlations.²⁰

All the methods so far touched upon involve control and provide some basis for prediction. Trends and correlations once determined make possible prediction. The question remains whether or not prediction may be made more specific in individual cases of family behavior.

¹⁸ *The Changing Functions of the American Family*, 1931.

¹⁹ It is apparent that the ascertainment of trends is applicable to the many aspects of family life subject to change. Its value consists in the exact graph which it presents of past change and of the projection of the trend into the future which it permits one to hazard. The reliability of the projection forward depends obviously upon the expectation that the factors determining the trend will maintain the already indicated relationships, and especially, that no new factor such as an economic depression will disturb the situation. But since depressions occur periodically, their influence upon familial trends may perhaps also be determined and taken into account.

²⁰ "Multiple Factor Analysis," *Psych. Rev.*, XXXVIII:406-27 (1931).

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An attempt is now being made to apply the technique of prediction worked out by several investigators on the possibilities of success or failure upon parole to the prospects of successful or unsuccessful adjustment in marriage.²¹ The problem is to determine upon the basis of factors determinable at the time of marriage the statistical expectation of successful marital adjustment.²² The prediction is in terms of group probabilities somewhat analagous to life expectancy tables. A limitation of the method is that prediction is in terms not of the given married couple but of the group into which they are thrown.

Data and Technique of Case-Study

In the field of the family, as in other fields, the case-study method is still in the preliminary stage of its development. Its data consist of personal documents of various types, biographical and autobiographical materials, statements, reports, diaries, life histories. Our presentation of the problems involved in the consideration of the data and techniques of the case-study method may be made under three heads: (1) appraisal of available case-study data; (2) the interview; and (3) analysis of case-study materials.

Case-Study Materials. So far as the writer is aware, no adequate attempt has been made to catalogue and appraise the existing stores of case-study data relevant to research upon family life. These include (a) family life of preliterate peoples; (b) historical documents on family life in ancient, medieval and modern society; (c) works of literature which depict family behavior; (d) case records of family welfare agencies, of child study institutions and other research centers; and (e) personal documents such as letters, diaries, autobiographies and biographies.

Ethnological materials on the family and social life of preliterate peoples are well known and accessible. They afford an adequate body of data for the sociology of the primitive family which remains to be written.²³ While the earlier studies tended to emphasize the

²¹ See Hart, Hornell, "Happiness in Relation to Age at Marriage," *Jl. Soc. Hygiene*, XII:403-407 (1926).

²² Burgess, E. W., and Cottrell, Leonard S., Jr., *The Prediction of Success and Failure in Marital Adjustment*, 1933.

²³ Westermarck's *History of Human Marriage* was such an attempt and presents a social-biological analysis of the primitive family. Lowie in *Primitive Society* and Rivers in *Kinship and Social Organization* have provided a realistic interpretation of the more recent monographic reports.

external forms of social organization of the family the modern cultural anthropologist is successfully seeking to probe into its inner life.²⁴

The family life of past historical peoples, unlike that of preliterate peoples, is closed to original first hand research; the research students must be content with the documents that are now extant or with those which may be discovered. Unfortunately, the great body of historical documents deal more fully with the political and legal than with the social and personal aspects of family life. Consequently, the description and analysis of the ancient, medieval, and even modern family are more largely concerned with formal organization of the family than with its intimate life. Calhoun's *The Social History of the American Family* exhibits the values and limitations of the use of historical materials for description and analysis of the family in a modern cultural society. It is unfortunate for comparative purposes that no work of similar scope and utilization of materials exists for other cultural peoples. The Deutsche Akademie für Soziale und Pädagogische Frauenarbeit, however, has now underway a comprehensive series of projects on the stability and instability of the present German family that is more extensive than any previous undertaking in family study.²⁵

In comparison with historical documents, literature in its various forms of folklore, poetry, drama and fiction finds in the family and the behavior of its members one of its focal points of interest. In the Hebrew scriptures have been preserved vivid pictures of personalities and events of the patriarchal family. In the legends and dramas of the ancient Greeks, psychoanalysts profess to find the prototypes of the universal mechanisms of family interaction. In modern fiction as in the trilogy comprising *Clayhanger*, *Hilda Lessways* and *These Twain* of Arnold Bennett, or in the *Forsyte Saga* of John Galsworthy, are found portrayals of family life which impress the reader with their authenticity and significance. As yet the sociologist has made little or no use of these materials except perhaps indirectly, as for guidance in his own research. In the

²⁴ Representative of different types of cultural studies of primitive family life are Malinowski, *The Family among Australian Aborigines* and *The Sexual Life of Savages*; Radcliffe-Brown, *The Social Organization of Australian Tribes*; and Mead, *Coming of Age in Samoa* and *Growing up in New Guinea*.

²⁵ The first volume in this series, *Das Familienleben in der Gegenwart*, by Alice Solomon and Marie Baum, contains 182 family monographs.

meantime, in present day literature problems of the family and the relationship of the sexes are becoming increasingly the theme of many of the ablest works in fiction and drama.²⁶

Many social service agencies such as family welfare organizations have a vast accumulation of case records of families. These records, although kept chiefly for purposes of effective service, are invaluable for many types of research. Social agencies have almost invariably, and often with considerable inconvenience, been most hospitable to use of their records for research purposes. Certain limitations of social case records for research purposes have been pointed out. Emphasis, naturally, in the past has been placed more upon the economic than upon the social structure of the family. Too often, the attitudes of the family find inadequate or even distorted presentation in the record. To remedy this latter deficiency, the verbatim record, where the interview is reported in the first person, has been suggested.²⁷

Child study centers, which have multiplied since the establishment of the Institute for Juvenile Research in Chicago in 1909, at present contain the largest store of family data of interest to sociologists. Psychiatrists and psychologists early found that most problems of child behavior were in fact problems of family life. The treatment of difficulties of young children turned out to be largely treatment of parent-child relationships. Therefore, the records of child study agencies have a great mass of data on family behavior. Very few of these data, however, have been utilized by sociologists.

Psychiatrists and psychoanalysts in their studies of cases of indi-

²⁶ Fiction and drama, while revealing, do not, in my judgment, provide valid data for sociological analysis of family behavior. Their portrayal of events is not limited to objective description but is as unconfined as is the human imagination. Consequently, the validity of the data of fiction and drama is subject to no objective criterion but only to the personal reaction of the reader. One exception must be made to this exclusion of literary materials as sociological data. In so far as fiction and drama tend to express and to create the current ideas and ideals of family life they provide certain of the data for an analysis of social forces in changing family life. Furthermore, all literature that is revealing and authentic cannot but give to the students of the family insights and leads which may be put to good use in the formulation of problems and hypotheses for research projects. Finally, it is only common honesty to confess that certain delineations in literature, like those by Sigrid Undset, John Galsworthy, and Samuel Butler, in a certain sense provide an unattainable model for our sociological documents on family interaction.

²⁷ Burgess, E. W., "What Social Case Records Should Contain To Be Useful for Sociological Interpretation," *Social Forces*, VI:524-32 (June, 1928); Park, R. E., "A Race Relations Survey," *Jl. Applied Sociol.*, VIII:195-205 (Mar.-Apr., 1924).

vidual difficulty find family relationships to be a dominant factor. A few cases and many excerpts from cases have been published. There are undoubtedly many unpublished data in the private archives of practising psychiatrists. These materials are, naturally, of personal and confidential nature, but a small number of revealing psychoanalytic cases have found their way into the literature.

There are undoubtedly at large in the possession of private individuals, a great number of personal documents of various types; of these only a small fraction are accessible to sociological treatment. The published autobiographies are only a small proportion of the written life histories. The number of personal intimate diaries must run into hundreds of thousands if not into millions, to judge by newspaper reports or by our own knowledge of their prevalence within the circles of our acquaintance. An even greater volume of data is provided by periodic interchange of letters, peculiarly revealing as to personal attitudes and family relationships. Other personal documents such as baby books, family albums, name books, are all materials for family research, but so familiar that they seem not to be significant. Obviously the entire mass of spontaneous personal documents cannot be salvaged, but provision for significant collections of them can and should be made.

The Interview. The case-study method may be divided into two parts, the techniques of securing and appraising data and the techniques of analyzing and interpreting data.²⁸ The reliability and validity of the life history or other personal documents may be examined with reference (a) to the type of interview situation in which they were obtained, (b) to the test of internal consistency, and (c) to verification of crucial points by objective tests. There is space in this chapter to consider only briefly the interview situation in relation to the authenticity of personal documents.

1. The *punishment* situation is one where the relationship between the interviewer and the person interviewed is one of *accusation* and *defense*. This is typically the legal situation²⁹ where the interest is in determining guilt or innocence. The testimony of plaintiff, defendant and witnesses under oath in a divorce case is

²⁸ The questions of method are basically the same whether we are dealing with original data or those obtained by the research worker or with secondary data or those obtained by him from other sources.

²⁹ Bibliography on "Testimony and the Interview in Legal Evidence," in Bingham, W. V. D., and Moore, B. V., *How to Interview*, 1931, pp. 305-307.

often notoriously false. Divorce records, although legal documents, must be rated low in reliability and validity.⁸⁰

2. The *investigation* situation produces a relationship, of a type similar to that of the punishment situation but of a lesser degree, which may be called the *investigative* and protective relationship. Investigation⁸¹ may be reliable in securing external facts but generally fails in attempts to get beneath the surface to the actual inner attitudes.⁸²

3. The *official* situation is one where routine information is desired, as in a census, in applying for employment, or in filling out a birth certificate. Here the relationship is *formal*. The data are required by law or otherwise, but only a limited number of external facts are sought.⁸³

4. The *casual* situation is one where the relationship of the interviewer and the person interviewed is that of *the stranger*.⁸⁴ Not infrequently, in this relationship of anonymity a husband or wife will reveal experiences and attitudes which they have long held secret.

5. The *friendship* situation with the relationship of *intimacy* has always been recognized as one functioning for the mutual exchange of confidences on familial as well as on other personal affairs.

6. The *penitence* situation with the *confessional relationship* has been institutionalized in the case of the priest and layman in the confession.⁸⁵ Wherever there are feelings of repentance and reverence the confidence given tends to assume the character of a confession. The sexual conduct of the person both within and outside of marriage has for generations been recognized as in the fields of the mores, of conscience, and of religion.

7. The *therapeutic* situation is present in the professional relation-

⁸⁰ Mowrer, E. R., "The Variance between Legal and Natural Causes for Divorce," *Social Forces*, III:388-89 (1924).

⁸¹ Bibliography on "The Interview in Social Investigations and Case Work," in Bingham and Moore, *op. cit.*, pp. 242-98.

⁸² The routine investigation of a family by a social worker may obtain an excellent report of its economic status, but a quite deficient picture of the complex of family attitudes.

⁸³ How the personal equation of the interviewer may affect the recording of objective data is indicated in Rice, S. .., "Contagious Bias in the Interview," *Amer. J. Sociol.*, XXXV:420-23 (1929).

⁸⁴ Bain, Read, "Impersonal Confession and Social Research," *Jl. Applied Sociol.*, IX:356-61 (1925).

⁸⁵ Burr, Anna R., *Religious Confessions and Confessants*, 1914.

ship where a person is seeking advice from an expert or specialist upon the solution of a problem. It may, therefore, be the relation between a person in difficulty and a physician, lawyer, teacher, social worker, or a psychologist, psychiatrist or sociologist. The family consultation clinic is based upon the assumption of the high reliability of information given in order to obtain the maximum of service.

8. The *research* situation is one where a scientific relationship is established between a person interviewed and the interviewer and where both are motivated by a common desire to make a contribution to the science of human behavior.

The foregoing methods may be used in different combinations; in fact, during the same interview, the situations may shift. In comparing family materials obtained in these different situations, however, it becomes evident that the research situation is, in general, superior to any of the others for securing personal documents that are reliable and revealing. The value of the document for disclosing the interplay of impulses and motives in family interaction increases somewhat in the order in which these situations have been listed above, that is, from the punitive, through the investigational, the official, the casual, the friendship, the penitential, and the therapeutic, to the research situation. In the appraising of any family document whether obtained at first or second hand by the research worker, it is in point to determine what was the relationship between the interviewer and the person interviewed in the particular situation in which it was secured.

Interview procedure may be guided or unguided. The guided interview is one that proceeds in accordance with a previously worked out schedule of questions or topics. By this device the control of the interview remains in the hands of the interviewer. It is the form to be preferred where the research worker knows in advance what data he desires and where he wishes to obtain comparable information on certain specific items. The unguided interview proceeds with a minimum of direction from the interviewer and a maximum of control by the person interviewed. In the psychoanalytic interview the attempt is made to secure the most favorable situation for the securing of data of forgotten experiences by the method of free association. In securing sociological, personal and familial documents, a long and detailed questionnaire is

perhaps most frequently used, although a short schedule of unguided questions is to be preferred if comparative use of data is not desired. It seems, however, that the best individual sociological family documents are those procured without the use of an outline and by a minimum of direction.

Because of rather widespread dissatisfaction with the uncritical and unsystematic character of interview technique, several interesting experiments have been made or are now in process. The most numerous of these are variations in the verbatim life history obtained by the person himself writing the history, dictating it, or by having a stenographer present, either with or without the knowledge of the person interviewed. In his *Marriage Study*,³⁶ Dr. G. V. Hamilton took elaborate precautions to insure the minimization of the personal equation of the psychiatrist, even to the extent of using written questions and of fastening the chair in which the subject sat. H. D. Lasswell³⁷ has formulated the most thorough-going experiment in securing control over all the conditions in the interview and in obtaining a complete report of all responses of the subject by utilizing as far as practicable sound and movement recording apparatus.

In family research, personal documents should be secured, if possible, from all members of the family. C. R. Shaw³⁸ in his study of delinquency has not only secured individual documents from all members of the family but has developed the technique of the family interview in which a verbatim record is made of interaction of the members of the family in the frank and free discussion of their problems. It would be informing to secure similar verbatim reports upon the family council,³⁹ although the observer's presence may introduce a complicating problem.⁴⁰

Analysis. Once the problem of securing family life history documents is solved, a much more difficult situation presents itself as these documents pile up. What answer is to be given to the

³⁶ *A Research in Marriage*, 1929.

³⁷ "The Problem of Adequate Personality Records: A Proposal," *Amer. J. Psychiatry*, VIII:1057-66 (1929).

³⁸ *Social Factors in Juvenile Delinquency*, pp. 283-343.

³⁹ Lindeman, E. C., "The Family as Social Process," *Proceedings Conf. on Familial Relations*, (Detroit, 1929).

⁴⁰ An adequate description of family life would require life history documents from each member both of normal and of problem families. The experiments that two or three of my students have made show the value of such a procedure and its feasibility even in the case of normal families.

questions: What to do with them? What mode of procedure in dealing with them will bring out their full sociological significance? They do certainly have the significance of historical documents, namely, to introduce the reader vicariously into new and widely different regions of family behavior and to offer flashes of insight into the nature and meaning of human interaction in the milieu of family life. This service is what Dr. Robert E. Park has termed *acquaintance with human experience*. Acquaintance with families through case studies has much the same human value as other sympathetic contact with the family, as through literature,⁴¹ through art, and above all through intimate and broad association.

Sociology, however, as a natural science aims to discover and render available *knowledge about* family behavior. Familiarity with many family documents like acquaintance with many families gives the reader a sense of intimacy and an appreciation of the variety and complexity and perhaps, in moments of profound insight, even a vivid perception of the basic oneness, of all family experience. *Knowledge about* the family in contrast to acquaintance with it will, therefore, be not complex, but simple; not concrete, but abstract; not common sense, but technical; not intimate, but formal.

The analysis of family case studies centers, in my judgment, about two somewhat different foci. If familial behavior is, for the moment, considered as static the emphasis falls upon analysis into types of families. If family behavior is, on the other hand, looked at in its dynamic aspect, the analysis turns upon the examination of processes in family life. The objective, then, of family analysis is to work out a logical scheme of family typology and of familial processes.

The problem of studying types in familial as in the wider social life is beset with difficulties. These might be very largely cleared up if it were fully realized that the concept of the type is a fiction, an abstraction, an ideal construction, which obtains its only validation in whatever service it can render in the control and prediction of behavior.⁴² Consequently, types are not absolute, but relative to the point of view and pragmatic goal of the research worker. The concept of types, like all other ideal constructions, is a technical

⁴¹ See Thurston, Flora M., *A Bibliography on Family Relationships*, 1932, pp. 209-25.

⁴² Kluver, Heinrich, "Typological Method" in Rice, S. A., ed., *Methods in Social Science*, 1931, pp. 176-85.

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device or research tool which is always rejected by the common sense of the "average man," which by the way is another ideal construction. The rural family and the urban family, when placed in juxtaposition to each other, may be considered as types. An ideal construction of each may be set up which then serves to measure and to identify actual families. It may perhaps be found that many families living in cities, as for example, immigrant families, actually correspond to the construct "rural family," and many families living in the country are, by their identifying characteristics to be denominated "urban families." The ideal construction of rural and urban types gains its validity if this typology gives a control and prediction over behavior not vouchsafed by common sense refusal to recognize typology.

Since Le Play made his distinction between the stable and the unstable family, many different types of families have been defined.⁴³ For the purposes of any particular project the student of the family has a mandate to select or devise that classification or typology most revelant to the solution of his problem. The working out of a more logical, exact and systematic typology of the modern family is an urgent research need.⁴⁴ Such a typology would not only help make available for uses of control and prediction our growing store of family histories, but would provide the conceptual framework for the collection of superior records, both case-study and statistical.

The dynamic significance of case-studies is to be apprehended by the analysis of familial processes. The point of departure here is the conception of the family as a unity of interacting personalities. In the interaction of its members are fused both cultural and temperamental elements, best observed perhaps through analysis of family behavior in terms of rôles, or of conceptions held by each

⁴³ The following are only a few of the more obvious and persistent classifications by type and by historical forms, as maternal and paternal family of preliterate society, patriarchal family, semi-patriarchal family and modern family; by "large" and "small" according to the extent to which more distant kinship plays a rôle in family affairs; by number of husbands or wives and their relation to each other—monogamous, polygamous, polyandrous; by number of children, childless, no child, one child, two children, three or more children; by national culture, English, French, German, Japanese, Turkish, etc.; according to its unity, integrated, unintegrated, disintegrated; by urban areas, non-family, emancipated family, patriarchal family, equalitarian family and matricentric family.

⁴⁴ Sanderson, Dwight, and Foster, R. G., "A Sociological Case Study of Farm Families," *Family*, XI:107-14 (1930).

member of the family of his own rôle, of the rôle of every other member, and of the rôle of the family as a whole. In rôle analysis the interaction of the family with the world outside is involved both in the conception which the community has of the family and of its members and also in the rôle which the family collectively and individually conceives itself playing in the community.⁴⁵

Other aspects of process analysis need perhaps only be mentioned briefly, since they are aspects of the interaction of rôles. The explanation of family rôles as giving expression to the basic impulses of the members of the family is a basic conception both of psycho-analytic analysis and of the sociological scheme of the four fundamental wishes developed by W. I. Thomas and F. Znaniecki.⁴⁶

Family tensions is another aspect of process analysis. For example, the analysis of family tensions as presented by Mowrer is in terms both of types and of processes of family conflict. The concept of behavior sequences in family integration and disintegration presents a scheme of generic sequences and coexistences which opens up possibilities, through the comparison of cases, of prediction and control.⁴⁷

Interrelations of Statistics and Case-Studies

The methods of statistical research and the case-study of the family have been treated separately as if they were unrelated. From the logical standpoint they may be conceived as two different methods each with its characteristic general assumptions, methodology, and techniques. But in the actual forward movement of research in the family field, and in terms of the requirements of many individual research projects, they are interdependent or integral. Nearly every statistical study, for illustration, raises many questions which the figures do not answer but upon which case studies throw light, or case studies reveal certain problems or processes which then become susceptible to statistical procedure. Certain of the significant projects in familial research, at the present time, require an interaction and integration of the two methods.

The following are certain of the more conventional ways in

⁴⁵ Burgess, E. W., "The Family as a Unity of Interacting Personalities," *Family*, VII:3-9 (1926).

⁴⁶ *The Polish Peasant in Europe and America*, 1927, pp. 73, 1859-60.

⁴⁷ *Family Disorganization*, 1927, and *Domestic Discord*, 1928.

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which discoveries from case studies may be utilized for quantitative research:

1. Family case studies as they explore the inner life of the family give clues or leads for explanation. These may be formulated as hypotheses and studied in such a way as to be verified or disproved by quantitative study.
2. When types of families are established by the case study method, they become subject to quantitative treatment and correlations with other factors become feasible.
3. The differentiating criteria of different types of families may be susceptible to quantitative expression, making possible a more exact and accurate definition and delimitation of the type.
4. Familial documents reveal basic relationships and attitudes which may then be formulated as questions and incorporated into scales of family relationships.

In a similar way, the following examples may be offered of the supplementation of statistical data by case studies:

1. The quantitative statement of family situations and relationships, such as annual rates of marriage and divorce and distribution by marital status, is valuable for accounting but requires supplementation by case studies to be revealing as to their significance.
2. Statistical measurement of social trends affecting the family should be accompanied by case studies to show the meaning of these changes for family relationships.
3. Quantitative data show coexistences of factors but seldom in themselves indicate the direction of causal relationships. The explanation of the statistically well established fact of the greater longevity of married than of single men must be sought, first through case studies, and then by statistical verification of the hypotheses disclosed.
4. The findings of family relationship scales require interpretation by means of family histories.

These examples are, perhaps, sufficient to indicate the general range of interdependence between statistical and case-study methods. The more dynamic significance of the organic interrelationships of

the two methods would require illustrations by concrete projects.⁴⁸

Finally, in our use of research techniques, we must be realists and not sentimentalists. The end of the research is knowledge of family behavior. Whatever method, or combination of methods, will advance the frontiers of knowledge is to be welcomed upon its own merits. From this standpoint, no "halo" value is to be assigned to any method. Only its utility for discovery is in point. There is accordingly no virtue in attempting to combine the statistical and the case-study methods in any project unless the joint or integral use of the two techniques is clearly indicated by the problem considered, the data available, or the data and results aimed at.

This chapter has been almost entirely confined to the data and the methods of the sociological study of the family. Both because of the unity of natural science procedure and because family behavior necessarily involves many disciplines, the explicit statement should be made that the sociological student of the family should have some familiarity with and knowledge of the data and the methods of research upon the family in the fields of chemistry, biology, geography, anthropology, psychology, and psychiatry and the other social sciences. At the same time, however, as a sociologist, he should keep in mind the distinctive standpoint from which he approaches his data, the particular questions to which he seeks answers, and the given equipment in tools of research which he is competent to employ.

BIBLIOGRAPHY

- American Association of Social Workers, *Interviews: A Study of the Methods of Analyzing and Recording Social Case Work Interviews*, New York, 1928.
- Bingham, W. V. D., and Moore, B. V., *How to Interview*, 1931.
- Burgess, E. W., "The Family as a Unit of Interacting Personalities," *Family*, VII:3-9 (1926).
- Durkheim, E., "Introduction à la sociologie de la famille," *Annales de la faculté des lettres de Bordeaux*, 1888, 257-81.
- "La Famille conjugale," *Revue philosophique*, LXI:1-14 (1921).
- Fluegel, E., *The Psycho-analytic Study of the Family*, 1921.
- Hobhouse, L. T., Wheeler, G. C., and Ginsberg, M., *The Material Culture and Social Institutions of the Simpler Peoples*, 1915.

⁴⁸ See Frazier, E. F., *The Negro Family in Chicago*, 1932.

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Jocher, Katharine, "Methods of Research in Studying the Family," *Family*, IX:80-85 (1928).

Le Play, P. G. F., *Les ouvriers européens. Études sur les travaux, la vie domestique, et la condition morale des populations ouvrières de l'Europe*. Précédées d'un exposé de la méthode d'observation, Paris, 1855.

Mowrer, Ernest R., *Family Disorganization*, Ch. VI, 1927.

———"Disorganization in the Rural Family (a Plan of Study)," *Proceedings Detroit Conf. Rural Family Relations*, 1929, 35-38.

—"The Study of Family Disorganization," *Family*, VIII:83, 85-87

Robinson, Virginia P., "Case Studies of the Family for Research Purposes," *Family*, VI:298-300 (1926).

Shaw, C. R., "Case Study Method," *Pub. Amer. Sociol. Soc.*, XXI:149-57

Thomas, W. I. and D. S., *The Child in America*, 1928.

Toops, L. C., "The Measurement of Success in Marriage and Parenthood," *Teachers Coll. Record*, XXX:579-88 (1929).

Zimmerman, C. C., "The Family Budget as a Tool for Sociological Analysis," *Amer. Jl. Sociol.*, XXXIII:901-11 (1928).

CHAPTER XV

THE USE OF STATISTICAL DATA AND TECHNIQUES IN SOCIOLOGY

MUCH has been said and written regarding the usefulness of statistics as a research tool in sociology. Three schools exist. A considerable number of sociologists feel that our subject has passed through the philosophical stage and that its future rests almost exclusively on quantitative statements of our several problems and on procedures for handling these numerical data. A second group, inclining to the other extreme, believe that the essential elements of our subject cannot be stated in quantitative form, that all attempts to use quantitative methods can do no more than scratch the shell, cannot get at the kernel. The third group hold views intermediate between these extremes. They believe that theory and observation must go hand in hand, and that statistics is but one technique for handling observations. It is to this last group that the present writer belongs, and all that is said below by him should be read accordingly.¹ With this preliminary let us turn to our subject.

Published and Unpublished Sources

The experienced sociologist, approaching his problem from the statistical angle, turns first of all to published sources of material on his subject. Perhaps no greater need exists in social science than a comprehensive, careful and detailed guide to such published sources. How many weary hours all of us have spent in quest of the particular series of data that we need for illustration or for manipulation. How easy it is to find a table bearing on our problem; how hard to be sure that the one we have found is the best!

¹ See the excellent presentation of the attitude of the "middle grounder" by Professor Irving Fisher, in his address as President of the American Statistical Association. His remarks as economist and econometrist should be read by all social scientists, for they are equally valuable for the sociologist. "Statistics in the Service of Economics," *Jl. Amer. Statistical Assn.*, XXVIII:1 (Mar., 1933).

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It is useless here to attempt even the beginnings of such a source book. There is no department of the Federal Government that does not issue periodically or occasionally material of great importance to our research. Hardly a bureau fails to afford grist for our grinding. The organization of the statistical work at Washington is a fearful and wonderful thing. In spite of reorganization after reorganization, we still find significant vital statistics emanating from the Departments of War, Navy, Labor, Agriculture and Commerce as well as from the Public Health Service and the Interstate Commerce Commission. Data on education are presented by a number of bureaus. Materials of definite bearing on cost of living are produced in several divisions.

When to the federal data there are added the reports of various state and municipal bureaus in forty-eight sections of the country, the problem is greatly magnified. And if there are also considered quasi-public and private agencies such as the Metropolitan Life Insurance Company, the Russell Sage Foundation, the American Telephone and Telegraph Company—to name but a few in a narrow neighborhood—the task of reaching the ultimate mass of material is colossal.

Much has recently been said about the utilization of unpublished data. Some of the most valuable treasure houses of information are the run sheets or original records of governmental bodies and private agencies. The Institute of Social and Religious Research and the Milbank Memorial Fund, to cite but two agencies, have made extremely valuable contributions by utilizing the run sheets of the Census Bureau's population censuses, and original records of deaths. Perhaps even as much as a source book of published data, we need organized clues to data that have been collected but not published, possibly not even tabulated.

The Need for Official Aid in Guiding Users. What sources of statistical data may the sociologist utilize? He may utilize nearly any data, provided that he knows the eccentricities of their collection and compilation, and that in his deductions from the material he guards against drawing more positive conclusions than their paucity warrants. Officially gathered material, such as that resulting from our federal censuses of population, of agriculture, of manufactures, of religious bodies and the like, are, in the main, reasonably sound and of fundamental importance to the sociologist.

The same may be said of most of the rest of the material available to him. He either has ready to hand nicely constructed tables or can with minimum effort construct such tables. He is inclined to feel that he has been entirely freed from all the onerous tasks connected with gathering the data. Stamped as the figures are with official sanction and with the authority that cold type lends, the scientific skepticism of the user is likely to be lulled to somnolence. He becomes as credulous as the traditional rustic at the county fair.

Each enumeration has its peculiarities, its inaccuracies, its incomparabilities with other similar masses of data. Much of this the individual user must work out for himself. He must, as nearly as possible, relive the work of enumerating, of editing, of tabulating. He must carefully watch for changes of definition or of instruction to field workers; he must attempt to learn the influence of differing dates of enumeration; he must discover what if any changes have come in the basis of classification.

However, it is obviously impossible for those of us who are remote from the actual gathering of the data to discover the facts necessary to a full evaluation and critique of any given mass of material. This must devolve either upon those who have actually collected and tabulated the material or upon a group of specialists whose primary task shall be the discovery of errors and eccentricities. For some years a major work of certain of the Canadian statistical officers has been to analyze the official material, to discover omissions, inconsistencies and incomparabilities, their causes and results, and to caution users against misapplications. It is extremely regrettable that a similar practice is not current among official bodies in this country. No greater need exists than for such agencies as the Bureau of the Census, the Bureau of Labor Statistics, and the like to organize "divisions of accuracy and caution" to aid users of their figures in avoiding pitfalls and to improve the techniques in the gathering of official statistics so that past errors may not be perpetuated.²

Difficulties of Adapting Case Material. Thus far we have discussed the large scale massings of material gathered by great agencies and intended *ab initio* for statistical use. Another type of

² Moves along these three lines toward increase in the usability of social statistics have already been instituted by the Committee on Social Statistics of the Social Science Research Council. It is hoped that significant results will be forthcoming from its efforts.

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source exists, that of data gathered in the routine of administrative duties. Police "blotters," court records, marriage registers, files of case records of a thousand kinds of institutions—all these constitute veritable mines of quantitative material already gathered and awaiting tabulation. For many purposes they are invaluable, yet most often their use leads to disappointment.

In the main no more uncertain statistical approach to social problems exists than that which leads through case records. Very few understand the statistician's attitude toward the combination of case histories into tables. There seems to be current the idea that he is over-particular, that after all, when he enumerates he merely counts schedules filled in for cases, *i.e.*, case records, and that in consequence he is hyper-critical as well as hypo-critical in his disdain for case records. The statistician, viewing the average record card as a statistical schedule finds that if he had been called in at its inception he would have drawn up an entirely different document. In most instances the very vehicle for gathering the data violates every rule that experience has set up for a good schedule, as conducive to good data. In the second place he finds that the point of view of those filling in the cards has been hopelessly non-statistical. The personnel is not selected for any statistical aptitude but from entirely different points of view. Third, no attempt has been made to standardize answers so that accurate tabulation may result. Ordinarily the statistician draws up careful instructions to provide that cases generally alike will result in like cards, those generally dissimilar in unlike cards. Usually for the filling in of record cards no such instructions have been drafted. The recorder is purposely given every latitude for his powers of diagnosis. Finally, no rules have been set up for selecting cases, a procedure that the statistician long since has come to consider of fundamental importance. Ordinarily the case records constitute a very warped sample.

The statistician, then, usually approaches a file of case records with the pre-judgment that the record card, its administration and application are all wrong and that the cases covered are not typical of anything in the world except themselves. Ordinarily he is right, so often so that he needs must remain skeptical until the opposite has been proven. A notable exception, and one demonstrating the practicability of converting the right sort of case records into sta-

tistics, has arisen out of the use of medical statistics. Probably no more elaborate case records exist than those of medical science, yet out of them grow some of the most accurate statistics that we have, and in an extremely complicated field. It has taken years to work out the basic schedules, to educate the personnel, to give them the prods toward complete enumeration. Though much still remains to be done even here, it constitutes the supreme example to those dealing statistically with case records.

Thus the sociologist may use case histories, but if he be wise he will use almost any other source first, and in such case material as he uses he will proceed with the greatest caution at every stage.

This is no place for a discussion of the techniques for gathering material and the relative merits of each. Any good text does this adequately. Whatever source of gathered material a research worker may utilize he in most instances must in time resort to gathering his own. Such material, obtained for the purpose of the study itself will be vastly more usable than all the mass of published, unpublished or untabulated data gathered by governmental bureaus, by agencies, by other individuals. Costly in time, in money, in effort, they are of peculiar value since in their gathering, their editing, their tabulation they had the single scientific point as goal, rather than broad, general usefulness or administrative practicalities.

Statistical Techniques

The sociologist, using statistics, is usually first concerned with describing, be it description of a community, an area, a class, or what not. He is interested in size, in internal structure and the like. Soon, however, he realizes that absolute numbers for these descriptions are quite inadequate; that it is extremely difficult, if not impossible, to have satisfactory description unless the element described is compared with other elements—is seen in relative proportions. Therefore, the user of the data resorts to relative expressions, to rates, ratios, percentages and the like.³ Thus he is not

³ This discussion does not deal with such commonly used statistical measures as the various forms of average and measures of dispersion. These measures are so familiar to us all and have so often been dealt with in textbooks and articles as to warrant no discussion here. Many sociologists tend to misuse these measures, a frequent cause of such misuse being the failure of the sociologist to differentiate between continuous series, pseudo-continuous series and discontinuous series, or to realize the peculiarities of the data themselves.

satisfied with saying "There were 1,623 deaths in Community A during 1930" but must express this in terms of a population, that is, as a death *rate* of 12 per thousand, in order that he may be able to compare this with 23,719 deaths in Community B, where the rate is found to have been 11 per thousand. In studying the cost of living, he is not so much interested in the fact that the typical family budget costs \$1,922.63, as he is in relating that cost to a similar one at an earlier or later date in an *index* of the cost of living, or in comparing this figure for one class with a similar figure for another.

Rates and Ratios, Indexes and Indicia. Statistical convention designates many of these relative numbers as indexes. Personally, I prefer to call all but a very few "indicia." The series seldom measure the exact phenomena they are supposed to measure. They are not true indexes. Ordinarily they give but a vague indication, rather than constitute accurate measurements. Seldom do we have good yard sticks for the measurement of social phenomena except where years of laborious effort have resulted in the evolution of actual scales.⁴

There are two reasons why most of the so-called indexes fail to give good results. The first is that the series used were originally set up for almost any other purpose than that of giving a measure of the particular phenomenon under observation.⁵ Today we are more and more insisting that the phenomenon to be indexed be very specifically defined and that the various elements included in the definition be included in the index as well. Perhaps some of the worst errors that have been made in the past have come as a result of failure to comply with this requirement. Our greatest danger lies in defining our phenomenon in terms of the most available series, thereby stultifying our entire theoretical concept. The second reason is that long established and well understood tech-

⁴ See Part II, Ch. XVII.

⁵ A perfectly good series for one object, when "adapted" for indexing an entirely extraneous object, usually is far less valid. For years there was sought a "general utility" index number series. It was hoped by those working in the economic field that one series could be developed that could be used for most purposes. There was a time when we were fairly well persuaded that the cost-of-living index of the *Times Annalist*, based upon a dozen or so food commodities, really gave us a fair indication of the cost of living.

niques for refining are ignored.⁶ It is not so much a question of what methods the sociologists may use in his statistical studies, rather it is what *techniques* must he use. If he intends to utilize rates in any study he is pursuing, he must thoroughly master the techniques used by those most dependent upon rates and rate techniques—the vital statisticians. Today vital statisticians shun comparisons of crude rates, finding little value in any rate unless as many extraneous, complicating variables as practicable have been held constant. A more pertinent illustration is that of automobile accident rates. It is not sufficient to include in the denominator the population resident in an area. Account must also be taken of the flow of motorists through the area. Several devices are in current use for making constant such extraneous factors. The most common is that of standardization, next that of segregation, and finally that of partial correlation, which latter is all too rarely used.

The vital statistician, besides being concerned with controlling perturbing factors, is more and more insisting that particular effort be exerted to remove from the original numerators errors such as those resulting from the inclusion of cases arising outside of the area⁷ he describes but culminating within, and from the omission of cases culminating outside the area but arising within. Also he is more and more insisting on improvement in the denominators used in the computation of his rates. He realizes the dangers ensuing from neglect of the phenomenon of mobility or transiency. He accepts the fact that to relate a cumulation of cases to a highly fluid population base necessitates gross exaggeration in the resulting rate, and extreme incomparability with more normal population

⁶ It is platitudinous to say that social phenomena are results of complexities of causes. Almost every beginning student in the field seizes upon this as one of the few certainties in sociology. Yet but few among even our best sociologists put this platitude rigorously into practice in their research. Blithely they proceed, using crude rates, unadjusted ratios, and the like, although they know that age, sex, race, etc., are factors seriously complicating almost every social phenomenon and that there are many techniques adapted to almost any sort of data that will allow the student to negate variations in these disturbing non-pertinent factors.

⁷ A good example of the weight of such errors is to be found in Dorn, H. F., "The Effect of Allocation of Non-Resident Deaths upon Official Mortality Statistics," *Jl. Amer. Statistical Assn.*, XXVII:401-412 (Dec., 1932).

situations. He insists that his denominator be the *population exposed*, not some enumeration taken as of a given time.⁶

Techniques for the Study of Interdependence

After description sociologists turn toward analyses of causation. Few studies of causation pass far beyond theoretical stages without careful and objective analyses of the interrelationships between the phenomenon and such factors as our theorizing has made us feel are important in explaining the phenomenon. Most devices that have been invented for statistically verifying hypothetical interdependences and evaluating them are based upon departure from independence. The statistician begins with the query "How would my table look if A and B were really unrelated?" An independence table is created. Scrutiny shows that this table differs more or less from the tabulation that results from actual observation. Devices are set up for indexing the degree of departure of observation from theoretical independence. The greater the degree of departure the higher the amount of interdependence.

There are many ways of formulating independence criteria. These not only grow out of the form of the observed data but arise from basic logical assumptions as well. Some presume that the elements are measured variables and that they are distributed in bell-shaped symmetry. Others presume multi-class description of attribute material. Still others are adapted to material dichotomously divided. A number of other forms might be listed. In the main they fall under the general theory of contingency and correlation, though by no means do all of them yield correlation or contingency coefficients. In general their purpose is to give us substantiation or refutation of the theory that A and B are dependent upon one another directly or through the mediation of one or more other factors. Further, they purport to give some indication of the degree of this interdependence.

⁶ For example, in the A.E.F., while troops were being evacuated to the U.S.A., the "venereal rates," as customarily computed, rose to gigantic proportions in all the ports. This was due to the fact that in compliance with general orders each departing contingent left its venereal cases behind in France when it embarked. The proper denominator for computing the rate would have been the cumulated population, i.e., the sum of the populations that were in a position to have contributed cases, rather than the number of individuals present in the area on a given day.

These devices are of great usefulness to the sociologist. Since much of his best material is of the "attribute" sort, contingency and kindred coefficients are often better suited to his purposes than are those of correlation. True enough, there are wide fields in which series of the pseudo-continuous type of material prevail, but in the main the sociologist's data are more often classified into categories than measured along a scale. This to a large extent limits the statistical efforts of the sociologist, for correlation devices have been more elaborately developed than have procedures growing out of the theory of attributes. A wide range of techniques, however, does lie before him based upon the different criteria for independence.

Where correlation is used the statistician is more and more resorting first to the scatter diagram or its equivalent. Nothing is more vital than that one get before him a vivid picture of his material. It is a prime necessity in any study that there be a fairly high degree of homogeneity in the material to be correlated. Frequently the drawing of a scatter diagram will point out extreme atypical cases, and often alteration or even reversal of a correlation coefficient results from the inclusion or exclusion of a single case. As a means of discovering the illogical nature of original data, the scatter diagram is extremely important.

A second usefulness lies in the nature of correlation itself. In correlating we not only attempt to measure the degree of interdependence but we also believe that we can generalize this interdependence in terms of mathematical formulæ. We know that the natural scientist, using proper controls, gives a mathematical expression to the interrelationship between variables. He defines in mathematical terms the law of falling bodies, and the like. In his turn, the social scientist endeavors to do the same. Where the natural scientist is able to say, "If A is so much, B will be exactly so much," all that the social scientist can hope to do is to say, "When A is so much, B is more likely to be such and such than to be any other value, but will in any event be practically certain to lie within specifiable limits."

The physicist finds that some of his generalizations admit of simple formulation; others require very complex mathematical description. His simplest formula is that of the straight line. In like fashion the social scientist finds that his formulations range

from very simple to highly complex. The simplest form of correlation is linear correlation, and for a long time in practically all problems worked by social scientists it was assumed that the straight line properly described the inter-relationships. However, more recent techniques have facilitated experimentation with more complex formulations. The result is that we are finding that in more and more problems the linear hypothesis is far from satisfactory. As a remedy for this, techniques that are largely graphic have been developed for the exploration of problems assuming non-linearity. They depend upon the drawing of various mathematical or free-hand curves on scatter diagrams, shortening immeasurably the task of obtaining non-linear coefficients and of experimenting with whole families of curves.

The correlation coefficients and indexes, the regression equations and scatters allow the student whose material is expressed in terms of continuous variables not only to verify the fact of and estimate the extent of interdependence between the two but also to convert his theoretical statement into more rigid form. Further they afford the great practical aid of permitting estimates of one variable to be made from the other, frequently with high degrees of precision, a feat of great advantage under many sets of conditions.

Three other types of measures of interdependence should be mentioned. (1) Contingency coefficients are less frequently used than their value warrants. In most problems we have qualitative differentiations between categories in each direction, that is, for both attributes A and B. Under proper circumstances the interdependence of A and B can be measured as satisfactorily by these contingency methods as it can by correlation. There result no formulæ comparable with the regression equations and scatters of correlation. However, rough forecasts can be made that are not entirely unlike those of correlation. (2) The correlation ratio, developed to take care of the case of non-linear correlation where the form of the particular regression curve is not known, is very useful in situations where only one of the factors is a variable. It furnishes a good substitute for the correlation coefficient under these circumstances, though it in turn fails to afford a good forecasting apparatus. (3) Where the information is dichotomously divided and under certain limitations as to form of series, etc., coefficients such as tetrachoric "r" are available for performing functions similar to the other

coefficients expressed above. Each measure is suited to its peculiar form of data and each fulfills a valuable function under the right auspices.⁹

The Multiplicity of Factors

Few of us have the good fortune to select for our research a social problem so simple that variable A can be satisfactorily explained in terms of variable B. With our best theorizing we find that it requires not only B, but C, D, E and a host of other factors to explain A. We believe that our theorizing has led us to an enumeration of all of the factors entering into phenomenon A. In attempting to check up our theory it is found that simple correlation and its equivalents are not sufficient to give us a satisfactory statement of our problem. We need other and more elaborate techniques capable of doing more things. For example, we need a device which will indicate clearly whether or not we actually have considered all the important factors. Quite probably there are still a number of small factors which play a part. Possibly we have overlooked one or two that are vital.

The coefficient of multiple correlation furnishes an excellent test of the adequacy of our analysis. It is indeed a great satisfaction to the social scientist to watch this coefficient increase steadily as new pertinent factors are added, until it reaches sufficient size to warrant the feeling that the factoring of our problem is practically complete. The value of this measure and its companion, the multiple correlation ratio, can hardly be over-estimated. The latter device in particular is extremely useful since it requires that only one of the elements of the problem, the dependent variable, the phenomenon itself, be measured.

Supplementary to multiple correlation, and possibly more often used, is partial correlation. Its function can best be described by considering it simultaneously with other techniques designed for the same purpose. In the complex problems of social science not only is there relationship between A and B, A and C, A and D and the like, but also between B and C, B and D, C and D, etc. Out of the maze of interactions that lie back of any phenomenon as

⁹ The devices mentioned above are products of the British school of statistics. The Continental statisticians have given us some valuable equivalents that set up still other criteria for independence. These are little known in this country, but familiarity with them is increasing.

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observed, we wish to arrive at the purer relationships. We wish to find the interdependence of A and B freed from the perturbations produced by C and D. Ours is much the same as the problem confronting the astronomer who wishes to study the interaction of earth and moon unaffected by the sun and the other elements of the solar system. He cannot perform laboratory experiments upon earth and moon. Nor can he interject shields between the two objects being studied and the rest of the heavens. His data must describe things as they are. The sociologist experiences similar difficulties in controlling his observations.

The three general classes of devices to this end that statistics affords are those of segregation, standardization and partial correlation. These three were tersely discussed in connection with the correction of rates. They are equally applicable here. We may eliminate the effect of C by taking only one class of C and observing the behavior of A and B within that cell. In similar fashion we may limit our study of A and B to one class of D. If our data are sufficiently numerous, we may negate the interference of C and D by studying A and B in the small cell $C_m D_n$. Obviously this method cannot be pursued far without eliminating the data entirely, for if we attempt to minimize the influence of E, F and G in addition to C and D, we soon find that there are but one or two cases left. A further criticism of this technique arises from the difficulty of synthesizing the several interdependences of the various cells. Suppose that we find for cell $C_1 D_1$ a coefficient, r_{ab} , of .783; for cell $C_2 D_2$, of .869; of $C_m D_n$, of .526. It is with difficulty that we can piece these together into a single coefficient freed from the influence of C and D. A further difficulty lies in the fact that by this device we have not fully eliminated either C or D as variables. For within our classes $C_1 D_1$, etc., there is still some variation in C and D though it has been reduced materially.

The process of standardization fulfills the requirement of easy synthesis. It, however, frequently fails due to paucity of material, or to complete lack of certain types of information. Depending upon the degree of fineness of classification, the perturbing variables are controlled to a greater or less degree.

The most valuable aid is that of partial correlation. With this device it is possible to go beyond the point where further segregation would annihilate the data and into realms where standard-

ization cannot proceed, because of lack of information. It utilizes the interdependences of all of the variables in the light of the several variabilities and gives a comparatively easy device for eliminating one, then two, then three, and so on, interfering factors. It is adapted to progressive and selective analysis. With it we gain immediately the clarified measure of correlation and can be reasonably sure that there remains no more than a trace of influence of the controlled variables. Where the factors are all expressed in terms of continuous series, this device is by far the most satisfactory.

However, there is always the possibility of non-linearity to be considered. This is cared for either by fitting a specific curve, by applying free-hand sketches to scatters, or by obtaining partial correlation ratios instead of correlation indexes. As in the case of simple correlation, problems in which actual curves can be used afford facilities for forecasting, since the regression formulæ are available for this purpose.

Time Series and Their Analysis

The economist has interested himself in the field of time series analysis largely because he has ready at hand what for long seemed a reliable yardstick—the dollar—and because in the very course of business administration statistical statements are made periodically for purely administrative purposes. Early in his statistical interest he found time series already established and awaiting analysis. Large numbers of series have been studied and elaborate techniques for their treatment have been evolved. Fortunately, or unfortunately, the sociologist does not find available to him any single yardstick for measuring social phenomena, nor are there many social situations that automatically produce the periodic reports necessary for time series. The consequence is that in only a few fields does the sociologist find time series analysis among the devices which he must master.¹⁰

The seasonal factor, which is important in the breakdown of

¹⁰ Certain highly satisfactory time series studies have, however, been made, such as those of Dorothy Swaine Thomas and Harry Jerome, which investigate the inter-relationships of the business cycle and certain social phenomena. Those working in the public health field are much of the time studying their phenomena through the years. Others, like William F. Ogburn, who are seeking social trends in their studies of social change, will find as their series prolong, great need for most elaborate techniques.

economic series, is likely to play but small part in the sociologist's studies and its techniques will for a long time be of little avail to him. There is scant evidence that there will be many social series that will require study of cyclical oscillations. It is more likely that the sociologist will concentrate his attention on the direction of social change and on the relative degrees of change in secular trends. He will wish to discover whether or not during a given period the trend in a given series has been upward or downward and he will hope to be able to project the trend into the future—to prevision. For the first purpose, simple and arbitrary devices will be used for describing trend. Ordinarily the sociologist will be satisfied with computing a moving average or fitting a straight line. He will, however, wish to pursue certain safeguards to assure himself that whatever tilt upward or downward he discovers is a real directional change. Sydenstricker's use of the Lexian ratio in determining the genuineness of trends in death rates is a case in point.

Further than this he will attempt to describe the trend by fitting ¹¹ one or another of the more complicated curves to the data. In the main he will proceed more or less hit-and-miss in the selection of the particular curves he will utilize. Those of more scientific and mathematical turn of mind will attempt to set up a theory of how the trend should behave and will essay formulation of this theory.¹² The establishment of logical criteria and the setting up of formulæ to satisfy these criteria are among the most badly needed procedures confronting those engaged in time series analysis.

Special Techniques: Sampling and Statistical Research

Numerous special techniques, applicable to specific types of information and under peculiar conditions, have been experimented with. Many are extremely useful. In the main they are merely rigid devices for following logical steps. In nearly every field of

¹¹ Those interested in the fitting of arbitrary curves to time series will find considerable aid in the technical paper by Frederick F. Stephan, "Summation Methods in Fitting Parabolic Curves," *Jl. Amer. Statistical Assn.*, XXVII:413-423 (Dec., 1932).

¹² A good illustration of this procedure is to be found in the Reed-Pearl logistic curve of growth. Whatever one's reaction to the usefulness of this curve in making long-time forecasts of human populations, all are forced to admit that its logic is vastly superior to that lying back of arithmetic and geometric progressions used in many earlier demographic studies.

statistical study it is necessary to establish such special techniques. Ordinarily when they become strongly entrenched in a given field they find applicability in other kindred fields. Thus, the logistic curve, originally designed to describe the development of a colony of fruit flies, now finds application to the growth of human populations, and to production of various commodities such as the motor vehicle.

"Statistics and its Uses for the Sociologist" has been the text of many a propagandist sermon. Perhaps no greater service could be afforded our subject than to give full and free exposure to its *abuses* in our field. And from whom can such an exposé come with better grace than from among the ranks of the abusers themselves? In two earlier papers I have attempted to do this for four fields.¹⁸ Both discussions center around two chief causes of misuse. The first is that of unrepresentativeness, the second that of inadequacy of the material. The first of these has been treated above in dealing with what data the sociologist may use. There remain to be discussed procedures by which we may evaluate studies in the light of the amount of data available.

A single case is merely an instance, an illustration. Two or more cases constitute statistics. With a single case there is nothing to which the case may be referred. With a multiplicity of cases references may be had among the several members of the mass. With the accumulation of statistical numbers of cases we begin to impute to other masses of material the traits that we have discovered among the cases studied. Both logic and experience tell us that from a sample we can very well picture the make-up of the entire mass from which the sample has been drawn. There are, however, definite limitations to the degree of certainty, of clarity, with which we can utilize the small group to picture the large. If from an infinite number of cases two are chosen, the picture we obtain from these two can be inferred as a picture of the infinitude. However, it will not be as clear a portrait as we would have from samples of twenty, two thousand, twenty thousand. The smaller samples give blurred pictures, images that are progressively more "out of focus" the smaller the number of cases. As the number of cases is in-

¹⁸ "On Generalization from Limited Social Data," *Social Forces*, X:32-37 (Oct., 1931); "Ecology and the Statistical Method," *Amer. J. Sociol.*, XXXVIII:507-522 (Jan., 1933).

creased, the focus improves, the image becomes less and less blurred. More and more detail is distinguishable until a point is reached where, *for the purposes at hand*, the picture presented by the sample is identical with that which would be obtained from all the data.

From a badly out-of-focus portrait the chance of our being able to identify exactly the particular subject is very slight. The same is true when our sample consists of very few cases. If the focus is improved, that is, if the number of cases is increased, the chances of sound identification are increased. This process goes on up to a point where identification can be made with sufficient degree of exactness, with high enough odds in favor of the identification being correct to warrant our use of the identification for the purposes and in the manner requisite in the particular problem. The degree of blurring, the odds in favor of sound identification, may be determined with high precision for any statistical sample. Elaborate mathematical logic, together with straight-forward technique, enable us today to arrive at precise estimates of the validity of our generalizations. This entire subject is dealt with in one of the most important realms of statistics, the theory of sampling. The measures are called "standard" or "probable errors." There are few statistical measures used today for which the standard error formulæ have not been evolved. In recent years, under the leadership of R. A. Fisher, of the Rothamstead Experiment Station in England, numbers of our best mathematical statisticians have been bending their energies toward the improvement and perfection of procedures and formulæ for large and more particularly for small samples.

It is amazing how few sociologists using statistical methods seem to be aware of the possibility, to say nothing of the desirability or necessity, of applying these measures to the results of their statistical researches. All of us looking back into our studies find ourselves guilty of this neglect. The figures have looked so good, the results have seemed so valid, have checked out so nicely, that we have formed the habit of omitting to compute the standard errors. Alas, when we do turn to a test of our nice and precise generalizations so often their nicety diminishes, their precision evaporates. No sociologist should apply statistics to his problem until he has mastered the fundamentals of the theory of sampling, until he

understands the nature of standard errors of the statistical measures which he intends to use, and is fully equipped to apply the tests that they afford. Yet far too few of us do understand this important part of statistics. We are glib in our application of correlation methods, in our fitting of curves to time series, in our standardization of rates, but we know all too little about the safeguards to proper generalization, of ways of testing the representativeness of our data and of determining the adequacy of our material.

It is safe to predict that more and more of the generalizations the sociologists have been making from statistical material will have to be qualified. Decidedly larger masses of material will have to be obtained. The sociologist must shake off the habit of saying "They are all the data I have; I must make the most of them." His first dictum must be "They are all the cases I have; I must get more. Meanwhile I cannot generalize with any degree of precision. I must qualify my every remark with the preferatory phrase 'There seems to be possibility that' rather than 'There is.'"

There is little hope for statistical exploration in sociology unless the user of statistics masters its techniques. For almost every situation a mathematically or logically sound technique exists, one that has been thoroughly tested and is in good repute. Toying unskillfully with crude devices can do little to advance our knowledge of social laws and usually results in the logical bewilderment both of the user and of his audience. One is tempted to say that unless rigorous refinements are applied to the data and unless the very best of techniques are used, the sociologist may not use the statistical method at all. There are two versions of the old adage. One is "There are lies, damned lies, and statistics," the other and more authentic, "There are liars, damned liars, and statisticians." From the mass of statistical analyses constantly appearing in the field of sociology, one is tempted to add a fourth member to the Ananian hierarchy—sociologists using statistical methods. For, indeed, no worse offenders exist than the statistically illiterate sociologists. We should feel encouraged, however, over the increasing understanding by the rank and file of sociologists, of the technical aspects of statistics. We cannot but realize that great strides have been made during recent years in substituting mathematically and logically sound procedures for rough, empirical devices.

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One cannot leave this subject without taking notice of an oft repeated and widely held misconception. One frequently hears the protest, "The data are so poor that they merit only the crudest, rule-of-thumb techniques." If the data are really poor they do not merit the application of any techniques at all; they should be discarded. If they are rather poor but just sufficiently good to warrant use, the techniques that *must* be applied to them are of the most elaborate sort. The methods that exist for evaluating data and for adjusting errors in data are among the most intricate in our entire equipment. Procedures for eliminating inaccuracies in age distributions are elaborate to a high degree. The techniques of interpolation, where the original classificatory system is coarse, demand higher mathematics. Instances are endless. One is tempted to generalize "The poorer the data, the more complicated the techniques that must be applied (particularly those for evaluating and improving them) up to the point where there is no warrant in using the data at all."

Ultimate improvement in the use of statistics in sociology must come through frank yet friendly criticism of each other's work. Most of us are still babes in the forest of scientific procedure. Only through coöperating in pointing out the path can we hope to reach the high road that will eventually bring us to our goal—a valid understanding of the intricacies of the social mechanism and of the methods of its operation.

BIBLIOGRAPHY

- Chaddock, Robert E., *Principles and Methods of Statistics*, 1925.
Ezekiel, Mordecai, *Methods of Correlation Analysis*, 1930.
Fisher, R. A., *Statistical Methods for Research Workers*, 1925.
Rietz, H. L., *Handbook of Mathematical Statistics*, 1924.
Yule, G. U., *Introduction to the Theory of Statistics*, 1929.



CHAPTER XVI

SOCIOLOGY AND SAMPLING

PROBLEMS of sampling are sufficiently fundamental and controversial to occupy no small part of the thought of sociologists who are concerned with the validity of methods in their field. Indeed, the principal application of all but the most simple statistical tools is to situations where actual sampling is used or some sort of imaginary sampling is implied.¹ In discussing the problems of sampling in relation to sociological research, let us take first the situation where we know something about the population sampled, but lack time or money to enumerate the whole with respect to the data needed in our particular investigation. A classical example is A. L. Bowley's survey of economic conditions in working-class households in four English cities, published in 1915 under the title *Livelihood and Poverty*. It was out of the question to visit every household. He might have sent questionnaires through the mail, a procedure that even yet is not uncommon in social research; but in this case he knew better. He might have sent an investigator into each section of the city until he had obtained, say, 100 interviews. But, again, he knew better. He knew that some households would be more easy of access than others and that some of these omitted, either because nobody was at home, or because the householder had a fierce dog, or because people on one street were

¹ Let us try to keep a perspective in this discussion. There are, of course, realms in sociology where research, if it is to be done at all, must be done by methods some of which depend for their validity upon a sympathetic introspection similar to that of the cultivated soul who reads a poem and pronounces it true. There are, moreover, places where the application of exact criteria to numerical data is simply absurd, even though the data may be important, at least in the early stages of investigation of a theory. "To 43 men," wrote E. A. Ross in *The Changing Chinese* (Century Co., N. Y., 1910) "who as educators, missionaries, and diplomats have had good opportunity to learn the 'feel' of the Chinese mind, I put the question, 'Do you find the intellectual capacity of the yellow race equal to that of the white race?' All but five answered 'yes'." Ross would be among the first to recognize the limitations of this sort of inquiry, but sometimes one wonders whether it is not worth more than the meticulously elaborated findings of an intelligence test prepared for Caucasians, given to a schoolroom of Chinese children, and toggled out with cryptic mathematical symbols and appeals to the theory of probabilities.

less communicative with strangers than on another street, might be the very cases he needed to complete a representative picture of conditions in the city. Therefore, he took a directory, marked at random about one dwelling in twenty in each street, and saw to it that to the limit of their ability the investigators omitted no marked house, however hard it was to get information. When he got the sample, he could feel some confidence that it represented the city. Moreover, he could check some findings against presumably complete official statistics for the city. In Reading, for example, he found 623 school children in his sample, as compared with 632 in the official records reduced to a proportionate number. "In two cases," he reported, "we were able to correct the official statistics as given to us; for, finding that they differed from the sample we made further inquiries, and found that the official statistics had been erroneously stated."²

The difficulty of getting a representative sample increases more or less in geometric proportion to the number of sub-groups for which one wishes the sample to be representative. Even if a sample is good enough in the aggregate, it may be very inaccurate in its sub-groups. The best method of securing this internal representativeness is, of course, the use of controls. Instead of sampling at random one in twenty from an entire population, one may split the population into sub-groups or strata on the basis of information supplied in complete official statistics, and then sample at random one in twenty from each stratum. The advantages are obvious, but the extent to which use of controls will aid in insuring internal representativeness depends chiefly on two things: (1) The extent to which the stratification used is relevant to the problem. This relevance is hard to guess in advance. Before making a house-to-house canvass of several hundred farmers in a state, those in charge of a recent sociological investigation guessed that major farm crop areas would provide a useful control, and decided to sample a certain proportion of farmers from each region with a characteristic type of crop. After the data were collected the investigators found that a difference control apparently would have been more relevant to their inquiry. (2) The extent to which the population sampled is homogeneous. Fifty investigations using representative sam-

² *Loc. cit.*, p. 182. A recent interesting example of the same procedure is Margaret Hogg's survey of work shortage in New Haven, Connecticut. See bibliography.

pling, summarized by Adolph Jensen in the 1925 *Bulletin de l'Institut International de Statistique*³ showed quite satisfactory results in homogeneous regions like Denmark and certain other small European countries. But an attempt by C. H. Coats,⁴ dominion statistician, to take a representative sample in Canada disclosed some great difficulties.

An additional problem arises when a sociologist wishes to restudy after a time interval a sample of 100 communities, let us say, which were found to be representative of a region when first selected. There is an obvious advantage in using the same communities each time in order to study trends. But the farther one moves away from the date when the communities were selected the less likely they are to be representative. The problem is an old one, of course, to the economist working with index numbers. There is no more enlightening reading to a sociologist tending to minimize this problem than Paul H. Douglas' study of "Real Wages," where he seeks indexes for the United States which are representative not only in such a brief cross section of time as one year but also over a period of years.

The development of methods of insuring the representativeness of one's sample, especially by checking it against other data about the population as a whole, is among the main problems needing the attention of the research worker in sociology today.⁵ Perhaps one of the uses of the current financial adversity will be the encouragement of research along this line. There is ample ground for the belief that a study made at modest cost by adequate sampling methods may be worth more than a survey in the grand style which leaves one without basis for inference about the population sampled. It is not merely a statisticians' problem. How often can one point, in the literature of the case study method, to an analysis of cases in which the investigator's classifications of "more and less" or of "typical" have been subjected to a searching scrutiny on the matter of representativeness? It is sound methodology to study the usually more vivid documents of the neurotic as a basis for getting ideas and hypotheses; it is another thing to use the concepts of

³ See bibliography.

⁴ See bibliography.

⁵ Particularly needing investigation are the advantages gained by carrying on the entire study in duplicate or triplicate, even if limitations of money necessitate making the basic samples smaller.

"more and less" or of "typical" without recognizing their essentially statistical character.⁶

You will note that no mention has been made of probable errors, games of chance, or normal curves. *As long as one is interested solely in reporting the historical facts about the population as of the time of the study*, and uses the sample hoping that by careful planning and good luck he is not missing the mark very far, there may be only a limited demand for a theory of chance errors. The theory of errors appropriate in this case, namely, sampling from a limited population, has received little treatment so far by the mathematical statisticians. In some instances, however, procedures such as summarized by Bowley⁷ in a companion paper to that of Jensen may help one in estimating the expected range of chance error under certain ideal conditions whose practical limitations must be carefully thought out afresh in any particular situation.

But let us direct our attention to the italicized clause in the above paragraph: "As long as one is interested solely in reporting the historical facts as of the time of the study." Now, how often is this the case? Are we merely collecting butterflies for the fun of mounting them? Or do we have a notion that our butterflies may be useful in explaining a theory which may be of interest next year and later? If not the latter, one wonders whether taxpayers and endowments are not making a dreadful mistake in financing our doings, unless, of course, our work may reward society by providing it an exotic and entertaining illustration of how to use leisure time. Sociology is not physics, or even biology, but surely there is implicit in our research the idea that there is enough regularity about regressions, correlations, etc., in sociology to make us feel that our findings, so narrowly localized, may be general enough to show up again not too much altered within at least a short period of time.

Suppose we are interested in investigating a theory such as formulated in "Engel's laws." Suppose we find, as W. F. Ogburn⁸ found in a study as of 1916 of 200 white families in Washington, D. C., selected by a representative method, the equation

$$X_1 + 0.449 X_n$$

⁶ Cf. Bernard, L. L., "The Development of Methods in Sociology," *Monist*, XXXVIII:306-7, 314 (Apr., 1928); and G. A. Lundberg, *Social Research*, Ch. VIII.

⁷ See bibliography.

⁸ *Quart. Pub. Amer. Statistical Assn.*, XVI:374-392 (June, 1919).

where X_0 is the percentage spent for clothing, X_1 is the size of the family measured on a scale of calory requirements. This equation tells us that, if all families were of the same size, the increase of \$1,000 in income would be associated with an increase of about 3.4 per cent in the average percentage spent for clothing. Now we are not so much interested in these particular 200 families in 1916, one would suppose, as we are in Engel's second law, which is, As the income of a family increases, the percentage of expenditures for clothing remains about the same. This observed increase of 3.4 per cent per \$1,000 is rather small, to be sure; especially as compared with a decrease found by Ogburn of 11.8 per cent per \$1,000 in percentage spent for food. It would seem to be not inconsistent with Engel's theory. Yet we know from common sense, quite apart from a mathematical theory of chance, that other samples of 200, taken under conditions as nearly identical with the first as it was possible to make them, might yield us at a different figure from 3.4 per cent. But how much different? Might some of the figures be three or four per cent higher, for example? And might some be lower—zero, let us say?

To answer these questions, we have two alternatives. (1) We might collect a very large number of actual samples of 200, taken under conditions as nearly identical with the first as it is possible to get them. To collect very many actual samples of 200 is costly and often impracticable; it should be noted in passing, however, that the information yielded, even by duplicating or triplicating a study, often reduces one's margin of uncertainty at a rate out of all proportion to the rate of increase in cost. (2) We might collect a very large number of imaginary samples. We are justified, one would think, in substituting (2) for (1) only to the extent that we are prepared to believe that there is some sort of useful and logically consistent analogy between them.

The belief in this analogy should not, of course, be a mere act of faith. Sociology, as well as other social studies, and biology, owes much to E. B. Wilson⁹ for a series of vigorous, bantering papers in which he disturbs the sunlight of this faith with an ominous shadow of doubt. Indeed, we presently find ourselves face to face with the fundamental question: What conception of the very nature of social phenomena are we prepared to accept?

⁹ See bibliography; also *Jl. Amer. Statistical Assn.*, XXV:1-8 (Mar., 1930).

Let us suppose that we operate with imaginary samples and use the beautiful mathematical equipment whose mastery occupies no small part of the time of sociological students learning statistics. We are compelled at once to adopt a certain conception of the population or universe from which the observed sample is drawn. It is, of course, not a population of people, with flesh and blood and hopes and fears, but a population of numerical units—for example, indexes of income, of percentage spent for clothing, and of size of family, as in Ogburn's study. Nor does our population of indexes comprise, let us say, indexes for all the white families of Washington, D. C. in 1916. Rather it comprises—mark the difference—all the *possible* indexes of income, percentage spent for clothing, and size of family which *our particular observed sample* of 200 households *might have had* in 1916. It is a population, or universe, of possibilities. This conception that an observed fact or relationship is merely a sample from an extremely large number of facts or relationships which might have been thrown up by a population of possibilities, is a conception which, if I understand correctly, is taking the central place in modern physics, although its validity is not undisputed. Past unfortunate efforts of sociology to borrow from physics should not in themselves prejudice one against its acceptance as a working hypothesis about the nature of social facts and relationships. In fact, a case might be made for saying that Laplace and Quetelet, among others, applied the conception to social phenomena at a time when the invariability of physical phenomena was taken more or less for granted.

This conception of a population of possibilities, if applicable to Ogburn's 200 budgets, is applicable equally logically to a correlation table based on the 48 states of the Union. The entries in a table showing the relationship between sex ratio and the percentage of females married in 1930 represent a small sample of 48 pairs of indexes cast upon the beach by the tide of a vast sea full of potential indexes which these states might have had in 1930. This conception, if applicable here, is applicable equally logically to a time series revealing, for example, certain synchronous fluctuations over a period of 50 years in England and Wales between indexes of business conditions and the marriage rate. The 50 consecutive pairs of entries represent a sample of the vast number of entries which might have been thrown up in this 50-year period.

Some timid temperaments among us may prefer to dismiss the conception, calling it moonshine. But is it moonshine? It must be judged, one would think, by three criteria: (1) Is it practically useful to sociological research? (2) Is it logically consistent? (3) Is there any better alternative conception? On the answer to these questions seems to turn the problem of what use sociology is to make of the theory of probabilities. Who would vouchsafe a categorical answer with much confidence at the present time?

The writer must be content in the present chapter with illustrating briefly, and, it is feared, inadequately, one out of several special difficulties which at present seem to be blocking the path of a wholly confident answer.

It is quite obvious that a description in mathematical terms of this population of possibilities must be an inference from information provided by the sample.¹⁰ To make this inference one is forced to use formulas under conditions which conform only approximately to ideal conditions. One such ideal condition, in technical language, is that the units in the sample used in estimating the variance, or the measure of variation, in the unknown population must be independent of one another. In a sample of social data this idea is much less likely to be attained than in a sample of physical or biological data, where greater experimental control is possible.

A simple illustration is the problem of finding the probability that two different means rose by chance from a population in which the means were identical—in other words, finding out whether it is worth while to consider further, from this sample only, what reasons other than chance may be back of the observed difference. The unknown variation in the population must be estimated, using as units the deviations from the respective sample means. Now suppose that four-fifths of the people measured in one sample were males as compared with two-fifths of the people measured in the other sample, and suppose that sex were associated with the factor

¹⁰ One should not forget that there is a basic division of opinion as to the proper nature of this inference. Some hold that it is possible to specify within what limits the unknown parameter in the population—a correlation coefficient, for example—probably lies. Others, notably R. A. Fisher, reject this idea and limit themselves to assigning to the unknown correlation coefficient in the population a value such that there would be a chance, say, of one in 20 of getting from the population described by it a correlation coefficient as large as observed in the sample.

measured. The deviations would not be strictly independent of one another. Add a further complication. Suppose that the people measured in each sample did not come from a single homogeneous neighborhood, but comprised small clusters of people from several neighborhoods, and suppose that neighborhood differences were associated with the factor measured. The deviations from the two means would be still less independent of one another. One way to get an estimate of variation in the population conforming to the ideal conditions of the formula is to take a sample in such a way that it can be split into sub-groups by sex and neighborhood. The deviations can then be computed from the sub-group means.¹¹ Precision is greatly improved if the whole study is made in duplicate or triplicate, even if smaller basic samples are used. This is the procedure of R. A. Fisher's analysis of variance, which, it is not too much to say, is working a revolution in the technique of field experimentation in agriculture. Little effort has been made as yet to apply a similar technique to sociological data and its application will introduce some new difficulties. But the experience with agricultural data and some industrial data is sufficient to show how attempts to estimate variation are vitiated unless relevant heterogeneity is controlled. Until evidence appears to contradict it, one feels that this experience casts doubt on the validity of attempts like that of Dorothy Thomas and associates to use a theory of chance to check the stability of their observations on the social behavior of a single small sample of children. What is required are many samples, not necessarily large, but with heterogeneity appropriately controlled. The same may be said of studies like those of Freeman, Holzinger, and others on the influence of environment on the I. Q.'s of foster children. In some cases, methods of partial correlation may be substituted for the method of classification by sub-groups, as in Yule's study of poor relief, and in Ogburn's study of budgets, marriage, etc.; or a method of standard population may be used, as in the effort of Clark Tibbitts and the writer to apply the X^2 test in a study of success and failure of prisoners on parole. The extent of relevant heterogeneity left uncontrolled in such studies

¹¹ We must still assume that the males, for example, in a given neighborhood, behave with respect to the character measured as if they were uninfluenced by one another. Sometimes we can safely assume this. When we cannot, as happens particularly often in studies in human ecology, we are likely to underestimate grossly the expected range of chance variation.

may or may not be great. Let us not exaggerate the difficulty. One feels confidence that Ogburn's finding that increase of 3.4 per cent in percentage spent for clothing per \$1,000 increase in income in Washington would be improbable if in the population of possibilities the true rate of increase were zero, because the important factor of size of family was held constant and because it turns out that the indicated improbability is small enough to permit a considerable latitude of error in estimation. But in many important studies one still remains in doubt.

The condition, which we have been discussing, namely, that the units in the sample used in estimating the measure of variation in the unknown population must be independent of one another, certainly is not fulfilled in a sociological study of time series. In analyzing the synchronous fluctuation of "cycles" of marriage rate and business conditions about their respective trends one cannot check for chance errors an observed correlation coefficient. The annual or quarterly deviations from the trend which constitute a "cycle" of marriage rates, for example, are consecutive in time and clearly not independent of each other. Proposals to treat such data by the variate difference method or by some other method dealing only with deviations from the "cycles" instead of from the trend seem simply to be attempts to run away from the problem. Sociology is interested in synchronous "*cyclical*" fluctuations, even if there are no mathematical tools with which to check the results for chance variation. Studies of such fluctuations, by Hooker, Yule, Ogburn, Thomas, Hexter, Jerome, Rice, and others give one faith that many of the observed correspondences in the sinuosities of pairs of curves indicate real relationships in the populations of possibilities out of which they rose. Yet Yule's¹² and Von Szelski's¹³ success in producing high correlations empirically out of populations from which no correlations exist, the disappointing results of heavy expenditures by economists and business forecasters in analyzing business cycles, put a certain amount of strain on this faith.

This discussion has considered only one of the obstacles in the way of a sociologist's using tools based on the conception of a population of possibilities. If time permitted, other obstacles might be considered, such as conditions under which an assumption of a

¹² *Jl. Royal Statistical Society*, LXXXIX:1-69 (1926).

¹³ *Proceedings Amer. Statistical Assn.*, Mar., 1928, pp. 241-247.

normal distribution in the population may break down; such as the ambiguities which arise when different methods of estimating the chance error, although apparently equally relevant to the problem, give contradictory results; etc. The obstacle discussed, namely, the necessity that the units in the sample used in estimating the measure of variation in the unknown population be independent, is a practical rather than a logical difficulty. Even when, as in the correlation of "cycles" in a time series, the available mathematical tools cannot as yet be applied, it may prove of great value to retain the conception of a population of possibilities as a working hypothesis.¹⁴

It is repeating the obvious to say that, even if the sociologist has successfully estimated the probability of an observed relationship arising from a suitably defined population of possibilities, his task usually will not be ended. He seeks to supply a reasonable explanation of the relationship found, unless, as is seldom the case, the explanation is self-evident from the manner in which the problem was set up. This search for an explanation may lead him to the use of historical methods, case methods, or any other methods, including more statistics. The vision of a mathematical regression equation, with its range of chance error known, as the goal of one's research, may help thinking out one's problem, but often is not a very useful conception to follow to the literal end. The constants in the population of possibilities underlying a good many of our problems are probably shifting too fast in time or varying too much from place to place to justify spending money on the intricate kind of study which can be made profitably in physics or even biology. And, too often, numerical indexes of crucial factors are of unknown reliability or non-existent.¹⁵ In such circumstances, sole reliance on a few

¹⁴ One of the most penetrating appraisals which the writer has seen of the questions raised in applying to social phenomena the conception of a population of possibilities somewhat as described above is in R. A. Fisher, *The Social Selection of Human Fertility*. See bibliography.

¹⁵ The problem of determining (a) the reliability and (b) the validity of indexes is one of the most important confronting the research worker. Even such "intangibles" as social attitudes, when defined as *working* concepts, are yielding to measurement. The validity of L. L. Thurstone's techniques, for example, is now denied mainly by those whose philosophical predispositions or inability to follow an argument in statistical terminology have prevented them from analyzing what Thurstone really does. One has hopes that many other similar "intangibles" will eventually yield to quantitative treatment. The important question is not "Can it be done?", but rather, in a specific case, "Is it worth doing?"

statistics expressed with pretentious mathematics may lead to a specious sense of security which inhibits a real analysis.

Let us imagine a correlation table between indexes of two factors for small areas in a city. As percentages of native-born whites increase, delinquency decreases. There is a relationship, but how much is our knowledge advanced by the report of the correlation coefficient and its sampling error? Or what practical or theoretical use could one make of a regression equation from the table? Now let us consider the table merely as a frame for further research. For example, we can ask why areas within A and B, with about the same percentage of native-born whites, differ in juvenile delinquency; why there should be about the same juvenile delinquency in areas within B and C with different percentages of foreign-born whites; or in areas within A and D; or why the area within E differs from all the rest.

The correlation table helps us locate what might be called "critical points" very quickly. In doing so, it is often performing a function of far more practical importance than yielding a correlation coefficient or regression equations. The comparative study of A, B, C, D, and E may lead us to introduce other variables and make an interesting partial correlation analysis. Yet it is hard to conceive of a mathematical equation, however complicated, which will be of very much value unaccompanied by juvenile delinquency data of a non-quantitative nature, including, perhaps, documents whose interpretation is essentially an artistic procedure. And why, indeed, should we care whether or not our methods are copies of those used in the more nearly exact fields of natural science? *The Jack Roller* may more nearly resemble art than science, as the word science is conventionally used by scientists, but if the study helps us understand delinquency for a few years it ought to be good sociology. Why not, one ventures to suggest, declare a moratorium on the use of the word "science" as applied to studies of social phenomena? To *limit* ourselves to measurement would sterilize research. At the other extreme, to devise a definition of science which admits *Main Street* and *Crime and Punishment* to the canon is to invite condescending smiles from physicists or chemists while we at our annual meeting are raising a temperature trying to defend our definition. Let them have their word. Then, it would seem, we should be free—free to borrow as we like from their logic and

techniques, and to add logic and techniques of our own, without having to waste time in the scholastic futilities of discussing about a piece of research, "Now is this science or isn't it?"

One foresees an intriguing future for careful statistical studies in sociology, quite apart from studies in those happy regions where great masses of census data make a consideration of sampling, however applicable in theory, not always necessary in practice. And whenever the perils or limitations of statistics lead us to take refuge in the harbors of the historical method or case method, let us remember that they, too, have rocks which are dangerous and often concealed by fog.

BIBLIOGRAPHY

Representative Sampling

- Bowley, A. L., "Measurement of the Precision Attained in Sampling," *Bulletin de l'Institut International de Statistique*, Tome XXII, 1ère livraison, Rome, 1925, pp. 1-62 (Inserted at the end of Part III).
 Bowley, A. L., and Burnett-Hurst, A. R., *Livelihood and Poverty*, 1915, Chs. I and VI.
 Coats, C. H., "Enumeration and Sampling in the Field of the Census," *Jl. Amer. Statistical Assn.*, XXVI:270-284 (Sept., 1931).
 Douglas, Paul H., *Real Wages*, 1930, Ch. I.
 Hogg, Margaret H., *The Incidence of Work Shortage*, 1932, Part I, Ch. I; Part II, Ch. I; and Appendices I and II.
 Jensen, Adolph, "Report on the Representative Method in Statistics," *Bulletin de l'Institut International de Statistique*, Tome XXII, 1ère livraison, Rome, 1925, pp. 359-439. (Summary of 50 studies with bibliography).
 Lundberg, G. A., *Social Research*, 1929, Ch. VIII.

Application of Theory of Probabilities in Social Science

- Fisher, R. A., *The Natural Selection of Social Fertility*, Herbert Spencer lecture, Oxford, 1932.
 Thomas, Dorothy S., "Statistics in Social Research," *Amer. Jl. Sociol.*, XXXV:1-17 (July, 1929).
 Wilson, E. B., "Statistical Inference," *Science*, LXIII:289-296 (Nov. 19, 1926).
 ——— "What is Statistics?" *Science*, LXV:581-587 (June 17, 1927).
 ——— "Too Little Mathematics—And Too Much," *Science*, LXVII:52-59 (June 20, 1928).
 ——— "Probable Error of Correlation Results," *Proceedings Amer. Statistical Assn.*, March, 1929, pp. 90-93.

Yule, G. Udny, "Why Do We Sometimes Get Nonsense Correlations Between Time Series?" *Jl. Royal Statistical Society*, LXXXIX:1-69

-*An Introduction to the Theory of Statistics*, 9th ed., 1929, Ch. XIV.

CHAPTER XVII

SOME RESULTS OF STATISTICS IN SOCIOLOGY

IN TREATING the results of statistics in sociology,¹ three problems at once confront the student: first, what do we mean by the term statistics; second, what are the fields and the problems of sociology; and third, what objective criteria of results may be set up so that others may use them?

In this paper, statistics is considered as a method of study and research that begins with counting the different attributes of a subject or counting the degrees of a given attribute. This procedure gives rise to quantitative data. Statistics then proceeds to the analysis, comparison and interpretation of such quantitative data by means of techniques and mathematical procedures such as tabulation, graphic representation, averages, dispersion, reliability, ratios, indexes, correlation and the theory of probability.²

To answer the question, what are the fields and problems of sociology for purposes of this discussion, requires brief consideration of the various sorts of attempts to define the fields and problems of sociology, for upon this subject there is no consensus even among sociologists themselves. There are several alternatives. We might answer the question by using the classification of fields which

¹ A thorough treatment of the results of using statistics in the various fields of sociology would be rounded out by a careful consideration of the methods used in attaining such results. But the organization of this volume follows a division of labor which assigns to me a consideration of results with a minimum of emphasis on methods. Such being the case, I shall merely cite several thorough-going analyses of statistical studies of sociological problems in which the method and results are treated in an organic relationship. See Rice, S. A., second and third items in bibliography; also Zimmerman, C. C., "Mathematical Correlation in the Household Budget," *Sociologist*, June, 1932; and Thomas, D. S., *et al.*, bibliography. In citing these references to more critical analyses of statistical studies made with impartiality and skill, I want to make it perfectly clear at the start that my analyses are subject to certain limitations. One of the advantages of these limitations is that I may outline my analyses in non-technical statistical terms. One of the dangers of these limitations is that my treatment may appear over-simplified and hence misleading. I accept the limitations, however, and hope to reach some tangible guides to the evaluation of results. My analyses may, therefore, be regarded as supplementary to those just cited.

² Other definitions are discussed and cited in Day, E. E., *Statistical Analysis*, 1925, pp. 1-2, and Jerome, H., *Statistical Method*, 1924, pp. 11-12.

follows the concepts of different scholars. But the recent work of E. E. Eubank, *The Concepts of Sociology* (1932), indicates the complications of such a procedure. As a second alternative, we might turn to a less systematic but a more practical device of taking the titles of the divisions and sections of the annual meetings of the American Sociological Society and assume that these represent the consensus of opinions of scientific sociologists. But these titles have changed from year to year. There are differences of opinion about the titles and the functions of divisions and sections.⁸ Furthermore, some of the fields listed are not fields of subject-matter, but are themselves techniques of social study—for example, the division on social research and the section on social statistics. It is evident, therefore, that this solution is not satisfactory. A third alternative would be to take the topics used in the twenty-five year index of the *American Journal of Sociology* as published in 1922, or the most recent modification of this list used in the section on sociology of *Social Science Abstracts*. In either case there would be ten fields with their 48 sub-topics. To treat of statistical results for so many topics and sub-topics would be a task in magnitude far beyond the limits of this necessarily brief discussion. Some rational principle of selection is obviously required. I shall therefore set up some objective criteria of results and then apply these criteria to a specific sociological problem and some of its associated concepts. This procedure has the advantage of limiting my treatment to scientific problems and scientific concepts which are found in most of the formal fields of sociological subject-matter. The scientific problems and concepts of sociology chosen for analysis are: social attitudes, social distance, social status and the concept of the pattern.

The objective criteria of results selected as the focus of this discussion are termed such because they have been formulated in such a way that they may be used and verified by other students and applied to other fields and problems than those treated here. These criteria are three in number: First, has the application of statistics contributed to differential description of the subject studied? Sec-

⁸ See "Organization for research in the American Sociological Society," *Pub. Amer. Sociol. Soc.*, XXVI:6, 15 (June, 1932); see also Rice, Stuart A., Sorokin, P. A., Elwood, C. A., "What Is Sociology," *Social Forces*, X:319-327 (Mar., 1932); Chapin, F. Stuart, "What Is Sociology," *Scientific Mo.*, VII:261-264 (Sept., 1918); Becker, Howard, "Space apportioned forty-eight topics in the American Journal of Sociology," *Amer. Jl. Sociol.*, XXXVIII:71-78 (July, 1932). See also Part I, Ch. I of this volume (ed.).

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ond, has the application of statistics contributed to the solution of specific problems? Third, are the results of statistics so stated by the author or are the methods used in arriving at the results so described as to permit the reader to discover whether the author has met or violated certain fundamental conditions that limit the use of the statistical method?

It will be noted that the first two criteria are of such a nature that they may be applied to check results without compromising the reliance of these results on the validity of the underlying method, whereas the third criterion supplies a test of the general degree to which the results are conditioned by the underlying method.

The criterion of *differential description* may be conveniently applied by finding the answers to questions of an even more specific nature. Let us consider the results of applying statistics in the study of social attitudes, social distance and social status and ask the question, has statistics supplemented and confirmed qualitative description by means of quantitative description or measurement?

The pioneering attitude study of Floyd H. Allport and Dale Hartman⁴ presented the results of scaling the attitudes (opinions) of 367 Syracuse University students towards prohibition. The criterion of differential description was met by the results of this study because the individuals whose attitudes fell at the extreme limits of the scale of opinions were independently studied by interview and by self-rating of personality and social status. Comparison of the two techniques showed that the reactionaries exceeded the radicals in self-ratings on self-reliance and also in being more cynical and more snobbish. "The radicals, on the other hand, seem more retiring, more 'tender-minded' and religious, and more aware of their own natures, less self-assertive, more moralistic and meliorative, and more sensitive to the opinions of others." Thus such qualitatively different groups as reactionaries and radicals were partially differentiated by quantitative description.

The classical studies of Thurstone and Chave⁵ of religious attitudes also meet the criterion of differential description. An attitude scale of opinions toward the church⁶ showed decided differences in

⁴ *Amer. Polit. Sci. Rev.*, XIX:735-60 (Nov., 1925).

⁵ *The Measurement of Attitude*, 1929, esp. pp. 60-63, 67, 69, and 71.

⁶ For a critical analysis of the validity of this method of measurement, see Rice, Stuart, A., ed., *Statistics in Social Studies*, 1930, pp. 177-196.

the scores of qualitatively different groups that were tested on the scale. Graduate students (210) at the University of Chicago, and Chicago Forum attendants (181) scored higher degrees of adverse opinion (4.86 and 5.36 respectively) than did 103 Chicago divinity students (2.82). Church non-attendants (692) scored 5.92 and non-active church members (781) scored 5.65 in adverse attitude towards the church as compared with (678) church attendants who scored 3.05 and (581) active church members who scored 3.08. Jews (176) scored 5.44, Protestants (463) scored 3.96 and Roman Catholics (72) scored 2.90. Here again, we find that qualitatively different groups were quantitatively differentiated by an attitude scale.

One of the most interesting examples in which the criterion of differential description has been satisfied is Stouffer's "Experimental Comparison of a Statistical and a Case History Technique of Attitude Research."⁷ Using H. N. Smith's test of attitudes towards prohibition (Thurstone method) on 238 University of Chicago students, Stouffer required each of these students (who were not then informed of the precise purpose of the experiment) to write an anonymous account in 1,000 words of his experiences and feelings from childhood to the present day in connection with prohibition laws and in connection with drinking liquor himself. Each of the 238 case histories was then read independently by four judges who had been carefully selected because of their qualifications. Each judge then rated the subject's present attitude towards prohibition laws and his present attitude towards drinking liquor himself. The judges agreed closely on their ratings, as shown by a reliability coefficient of $+.96$. But the check did not stop with this device. Two laymen, the superintendent of the Illinois Anti-Saloon League and the secretary of the Illinois Association Opposed to Prohibition, were asked to read a random sample of 99 of the case histories and rate them. These two ratings showed almost as close agreement as that of the four judges. Finally, a correlation of the test scores of the 238 students with the composite ratings by the four judges as to the attitudes of these students towards prohibition laws, gave a correlation of $+.81$.

Since the authors of these attitude studies draw no universal generalizations from their studies, but confine their conclusions to the

⁷ *Pub. Amer. Sociol. Soc.*, XXV:154-156 (May, 1931).

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groups studied, we may agree that their results are not invalidated by the conditions of sampling. The same reasoning applies to their use of correlations. Finally, in each case true measurement was attempted because scales of reference were set up and the units of these scales were utilized in describing quantitatively, individual and group differences.

Let us now pass to a consideration of the results of statistical studies of social distance and social status. Although it is of course evident that the three concepts are intimately related, discussion of their definition and interrelations will be omitted.

Bogardus' original paper on social distance is an attempt at real measurement since his indexes are derived from a scale of reference.⁸ Whatever may be the criticisms of his method on grounds of failure to eliminate concealed differences of age or sex, or whatever the limitations set by an implicit assumption of "equal appearing intervals" in his scale, the device is true measurement because it is set up as an external criterion. Such limitations as have been mentioned are after all matters of refinement in quantitative description. In my opinion his scale for measuring social distance does meet satisfactorily the criterion of differential description because races known to be culturally different, e.g., Canadians and Turks show mean scale values of 0.30 and 4.80 respectively on social contact distance indexes. Also the attitudes towards Hindus shown by business men were found to be 5.40 and of teachers 2.97 on social contact indexes. Thus, qualitatively different groups are clearly differentiated by quantitative differences, or one identification confirms the other.

Shideler⁹ applied the Bogardus method to the measurement of social distances between component groups of a small college of about 400 students. He set up a five point scale of social distance as an external criterion of reference and discovered that the social distance measured from group A to group B may not be the same as the social distance from group B to group A. He designates this difference as the social distance margin. Thus the student body considers itself as 1.36 points distant from the faculty, whereas the faculty considers itself 1.82 points distant from the student body.

⁸ See bibliography.

⁹ "The social distance margin," *Sociol. and Social Research*, XII:243-252 (Jan.-Feb., 1928).

In this case 0.46 points is the social distance margin. Here again, despite methodological criticisms, we have two qualitatively different groups clearly differentiated by quantitative indexes.¹⁰ Wilkinson¹¹ reports different occupational distance scores for a non-religious law school group and a religious law school group with the sex factor held constant. Seymour¹² set up a six point scale for measuring rural social distance, following the Bogardus technique, and found a progressively increasing social distance index among normal school students in A, a small country school; B, a rural consolidated school; C, a small town school; and E, a city school. Thus we find that four statistical studies of social distance, the first between culture-race groups, the second between the component groups of a small college, the third between professional groups paired for sex, and the fourth between school groups in ascending order of urban living, show that recognizable qualitative differences between these groups are associated with quantitative differences in social distance as this is expressed in attitudes or opinions.

A somewhat different approach to the measurement of social distance was reported by Newstetter¹³ in a quantitative study of group acceptance of the individual as an index of interaction between the individual and the group. Thirty boys in each of four-week camp periods under the direction of eight counselors were the subjects of study. The measurements consisted of: (1) counselors' ratings of the boys' adjustment to the tent group and the camp as a whole on a 5-point scale; (2) personal distance votes in the form of ballots marked by boys to indicate the desirability of certain companions for certain situations; and (3) activity grouping, records by 20-minute periods of what every boy in the camp was doing and with whom he was doing it. The intercorrelations of the scores on each of the three scales were computed and found to be: counselors' ratings with personal distance, +.77; personal distance with activity grouping, +.60; and counselors' ratings with activity grouping, +.64. As

¹⁰ Consult Poole, W. C., "Social distance margin reviewed," *Sociol. and Social Research*, XIII:51 (Sept.-Oct., 1928). Note also that Bogardus in "Occupational distance," *ibid.*, p. 76, uses the term "social distance differential" as equivalent to "social distance margin."

¹¹ "Social distance between occupations," *ibid.*, XIII:243, footnote 8 (Jan.-Feb., 1929).

¹² "Rural social distance," *ibid.*, XIV:238-248 (Jan.-Feb., 1930).

¹³ "Wawokiye Camp: an experimental study of group adjustment," *Pub. Amer. Sociol. Soc.*, XXV:145-49 (May, 1931).

these data are from a progress report of research still under way, they cannot be satisfactorily evaluated in a statistical sense. It is worth noting, however, that this study possesses great promise of interesting statistical results provided the question of units of measurement is dealt with in as careful a fashion as Thurstone has treated the problem.

These studies in the quantitative description of social distance by Bogardus, Shideler, Wilkinson and Seymour, confirm previously known qualitative differences between groups and hence satisfy the criterion of differential description. But do these studies satisfy the third criterion of valid statistical procedure? Since the authors confine their generalizations to the data of their individual researches, questions of the representativeness of the sampling do not obtrude. Furthermore, the correlation procedure occupies such a minor place in these studies that there seems to be no difficulty on this point. The chief test of the statistical validity of the procedure comes in connection with the units of measurement. As I have indicated above, the authors have avoided the common error of confusing units of observation with units of measurement,¹⁴ because they have in each case constructed a scale of reference and given the quantitative description of each variable in terms of the units of the scale of reference which correspond to differences in the objects of study. Their fundamental method is consequently sound. It is the question of their technique which is subject to criticism. It is perhaps sufficient to note here that a comparison of the measurement techniques of the Thurstone scales on attitudes with the Bogardus scales on social distance, shows clearly that the "assumption of equal appearing intervals" is dealt with by Thurstone in a critical and explicit fashion, whereas it remains implicit and unaccounted for in the Bogardus scales.

The third concept of scientific sociology studied by the statistical method with results to be tested by the criterion of differential description, is the concept of social status. If we assume that status is a matter of social position and that the material culture possessions of a family are one index of social position, then the Living-Room

¹⁴ For a discussion of this fundamental point see the section by F. Stuart Chapin in Thomas, D. S., *et al.* (bibliography); also "The Meaning of Measurements in Sociology," *Pub. Amer. Sociol. Soc.*, XXIV:93-94 (1930).

Scale ¹⁵ supplies a measure of differences in social status. Records were obtained by the Minnesota Children's Bureau social workers of 29 prospective foster homes in the Twin Cities. After the schedules were scored, and entirely independent of this scoring, the Children's Bureau rendered its opinion on the 29 homes as poor, fair, good, or excellent foster home prospects. The results of the two evaluations were then compared and found to be in substantial agreement. The qualitatively expressed opinions of the Children's Bureau and the scale ratings agreed in 63 per cent of the cases at the lower end of both scales, in 82 per cent of the cases in the middle range, and in 90 per cent of the cases at the upper end of the scales. Thus we have an example of statistical description confirming the qualitative description of skilled professional judges. The cases are too few to justify generalization from this single study as to the validity of the scale and method in general. To correct this difficulty, at least in part, a tabulation was published ¹⁶ in 1932 showing the scores on 617 homes obtained in studies made in rural and urban communities in the Middle West, in the South, and in the East. These data suggest the possibility of differentiating such qualitative categories as a "lower middle class," an "average middle class" and an "upper middle class" by scores below 50 points, from 50 to 100 points, and from 100 to 150 points respectively. As to the possibility of differentiating homes of widely different social status we may report that Zeleny ¹⁷ found a mean score of 65 on 20 homes in an inferior neighborhood, and a mean score of 129 on 28 homes in a superior neighborhood of St. Cloud, Minnesota. During the academic year 1931-1932, two research workers, one a social worker and graduate student, the other a graduate student with statistical training, scored 50 homes of families receiving relief from the Minneapolis Family Welfare Association continuously since 1928, and scored 50 homes of professional men's families in Minneapolis. A mean score of 53 points was obtained for the lower status group and a mean score of 165 for the upper status group. Thus groups having qualitatively different social status showed strikingly different quantitative scores. Furthermore, the correlation between the scores of the two visitors

¹⁵ "Scale for Rating Living Room Equipment," *Institute of Child Welfare, Circular No. 3*, University of Minnesota; "A home rating scale," *Sociol. and Social Research*, XIV:10-16 (Sept.-Oct., 1929).

¹⁶ Chapin, F. Stuart, "Socio-economic status, etc." (bibliography).

¹⁷ *Ibid.*, p. 582.

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on the same 50 lower status homes was $+.898 \pm .027$, and the correlation between the scores of the two visitors on the same 50 upper status homes was $+.903 \pm .026$. On the 50 upper status homes the scores of one visitor's first and second visits correlated $+.977 \pm .0065$, and of the other visitor's first and second visits correlated $+.986 \pm .0039$. These results show a high reliability of the scale on the most variable subjects, the upper status homes.

In 1930, McCormick¹⁸ published her scale for measuring social adequacy. This study was based upon 249 families living in an area from Washington, D. C., to Providence, Rhode Island, and ranging over 14 levels of status. Ratings by 25 judges on a 7-point scale provided the criterion against which the items of the schedules were validated by the usual statistical procedures. The final validation was based on 184 families for which the data were comparable. The first test of this scale meets the criterion of differential description as shown by the fact that the group of major relief and delinquent cases at one extreme held a scale position of -1.39 on judges' rating and scored under 18 points on the social adequacy scale, whereas the group of college graduates earning \$5,000 a year and professional men's families at the other extreme held a scale position of $+1.50$ on judges' rating and scored over 82 points on the social adequacy scale.

Although the Chapin Living Room Scale and the McCormick Social Adequacy Scale seem to satisfy the criterion of differential description, it is evident that the present sampling base underlying both scales is inadequate. The Chapin scale has thus far been used on over 1,000 homes widely distributed over central and eastern sections of the United States. No results of the McCormick scale appear beyond the original study.

It now remains to apply this criterion to studies of social patterns. To make this test we may seek an answer to the question, has statistics disclosed underlying patterns which had not been so clearly revealed by the usual non-statistical analyses? If statistics has disclosed hitherto unrevealed social patterns, it has contributed to differential description of social phenomena. The concept of the social pattern is widely used in sociology as the familiar terms, culture pattern, behavior pattern, and ecological pattern testify. For purposes

¹⁸ "A scale for measuring social adequacy," *Social Science Monographs* (National Catholic School of Social Service), 1:73 (Oct. 15, 1930).

of this discussion three forms may be distinguished; first, spatial patterns; second, structural patterns; and third, functional or temporal (sequential) patterns.

The classic work of Shaw on delinquency areas,¹⁹ demonstrated the existence of an ecological pattern of juvenile delinquency rates for the city of Chicago. More recently the same zone rate pattern has been shown to exist for 5,856 cases in Philadelphia, 1,238 cases in Richmond, 4,978 cases in Cleveland, 1,185 cases in Birmingham, 1,291 cases in Denver, and 1,529 cases in Seattle.²⁰ White²¹ found the same type of spatial pattern in Indianapolis and Hallenbeck found evidences of its existence in Minneapolis.²² The verification of this spatial pattern of delinquency rates in relation to area is one of the most remarkable findings of sociological research in the United States. It required the application of comparatively simple, but rather costly, statistical methods to discover the existence of this spatial configuration which shows a graduation of rates that diminish from the business center of the city outward.

These studies of a geographic configuration of cases in delinquency areas satisfy the criterion of differential description by demonstrating the existence of a spatial pattern not revealed by previous qualitative studies. White's study and the accompanying discussion elaborate two advances in technique: (1) the use of mathematical statistical analysis by partial and multiple linear and curvilinear correlation; and (2) analysis of the distance between residence of offender and the spot where the felony was committed. In this study the validity of statistical procedures is discussed, so that I shall dispense with technical analysis except for the question of units. Both Rice²³ and Gehlke²⁴ call attention to the increase in the size of the correlation coefficient when the areas of the tracts are made larger, and Rice suggests that the "correlations are not so much between pairs of factors as between pairs of aggregates or

¹⁹ Shaw, Clifford R., *Delinquency Areas*, 1930.

²⁰ Shaw, Clifford R., and McKay, Henry D. (bibliography). For a critique of statistical pitfalls in ecological studies, see Ross, F. A., "Ecology and the Statistical Method," *Amer. J. Sociol.*, XXXVIII:507-522 (Jan., 1933).

²¹ "The relations of felonies to environmental factors in Indianapolis," *Social Forces*, X:498-509 (May, 1932) and discussion by F. Stuart Chapin, E. W. Burgess, and C. E. Gehlke, pp. 510-513.

²² *Minneapolis Churches and Their Comity Problems*, 1929, p. 102.

²³ *Methods in Social Science*, p. 558.

²⁴ *Op. cit.*, *Social Forces*, X:513 (May, 1932).

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complex of factors" as the possible explanation. My own tentative opinion is that the larger area is more nearly the optimum unit of measure for the subject studied, for if the unit of area is too large or too small, it misses these complexes and hence is a poor unit of measure, and thus tends to increase the errors of observation, thereby obscuring the real relationship and lowering the size of the coefficient of correlation.

Analysis of these studies of spatial patterns leads over at once to a consideration of structural patterns, since it is the point of approach, rather than intrinsic differences, that separate the spatial from the structural pattern.²⁵ Douglass²⁶ published statistical tabulations of 1,000 churches which show clearly that the complexity of structure of the Protestant church, as indicated by the number and functional variety of constituent organizations, increases from open country to village, from town to city; also that complexity of structure increases with the degree of successful adaptation to the community.²⁷ Sanderson²⁸ reports that study of 2,000 white Protestant churches indicates a pattern of the relationship between location and institutional growth. Churches of older age and declining membership are located nearer the center of the city where the indexes of social deterioration are high, whereas the growing churches of younger age are located nearer the outskirts of the city, where the indexes of social deterioration are low. Here we have revealed a relationship between the structural pattern of a social institution (the Protestant church) and the spatial or ecological pattern of the community, a relationship demonstrated by statistical studies and hitherto unknown.

Questions of sampling and other considerations of statistical methodology set no serious limitations to the results of these studies of spatial and structural patterns because the number of cases dealt with is large and representative and the methods of statistical interpretation are simple.

Analysis of patterns cannot neglect consideration of studies that deal with functional and sequential patterns, because of the importance of interrelationships of social phenomena. Studies of social

²⁵ See Chapin, F. Stuart, "The advantages of experimental sociology in the study of family group patterns," *Social Forces*, X:510-11 (May, 1932).

²⁶ *One Thousand City Churches*, 1926, p. 81.

²⁷ *Ibid.*, pp. 229, 355.

²⁸ Sanderson, R. W. (bibliography).

participation, in which the relationship of social participation to social status and to patterns of leadership has been treated statistically are recent examples.²⁹ These studies are scattered and are not based upon such large numbers of cases as studies of spatial patterns, but they do suggest some interesting beginnings. Taeuber³⁰ measured participation in community activities by weighting membership 1; attendance 2; contributions 3; committee membership 4, and officership 5. By a more refined system of weights that made allowance for the number of meetings attended, and so forth, the scores differed, but since a correlation of $+ .96$ was found between the two systems of weights, the simpler system published by Chapin in 1924 was used.³¹ The scores of 113 adults in Minneapolis in 1929 for social participation and educational status, correlated $+ .32$; and with income constant the correlation increased to $+ .82$. When social status as measured by the Living Room Scale was held constant the correlation increased to $+ .58$. Taeuber also found an $r = + .61$ for participation and social status as previously measured. This corresponds with $r = + .62$ of Chapin's original (1928) study. Although the cases are too few for generalization, these studies confirm common observation of relationship between participation and social status.

In general, statistical studies of active (as distinct from passive) participation, take two forms: (1) adults' participation in formal groups and associations, studied by the device of counting such records for recordable forms of participation as affiliation or membership, attendance, contributions, committee membership, and offices held, and then assigning some system of weights so that a participation score may be computed;³² (2) children's participation in spontaneous and informal play groups, studied by experimental methods or observation of participation under conditions of control.³³

²⁹ Time series studies of sequential patterns by Ogburn, D. S. Thomas, Hexter, Hurlin, and Chapin should also be consulted.

³⁰ *Group Participation with Reference to Socio-economic Status*, unpublished M. A. thesis, Univ. of Minnesota, 1929, pp. 67, 119.

³¹ "Leadership and group activity," *Jl. Applied Sociol.*, VIII:141-146 (Jan.-Feb., 1924); *Jl. Educa. Psych.*, XIX:101 (Feb., 1928).

³² Studies by rural sociologists, Hawthorn, Hypes, Hamilton, Kirkpatrick, Kolb, Lively, Melvin, *et al.*, and by Chapin, Ells and Brand, Mehus, Taeuber, *et al.*

³³ Studies by Dorothy S. Thomas, Mildred Parten, Ruth Arrington, Alice Loomis, *et al.*, are at present more concerned with perfecting valid techniques of observation than in demonstrating principles of participation.

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The studies of adult participation, where the units of observation and the units of measurement are comparable, have yielded results which indicate the existence of patterns of social participation which may be tentatively generalized as follows:

1. Among the masses, as the number of groups of participation (by membership) increases, the participating population tends to diminish in arithmetic progression (a sort of principle of diminishing returns in participation).⁸⁴
2. Among leaders, as the number of groups of participation (by membership) increases, the participating population increases also until a point of saturation is reached (usually at about six concurrent group activities), and then diminishes.⁸⁵
3. The number of groups of participation tends to increase with the social status of the participants, where participation is measured by some system of assigned weights and social status is measured in terms of years of education or scores on material culture possessions.⁸⁶

The criterion of differential description has now been applied to the results of statistical studies of social attitudes, social distance, social status, and social patterns. It remains to apply our second criterion of statistical results, namely, Has the application of statistics contributed to the solution of problems? This criterion at once subdivides as it applies on the one hand to scientific problems where the aim is understanding and prediction, and on the other hand, to specific melioristic problems where the aim is social control or reform. In this discussion I shall confine my analysis to scientific problems where the aim is understanding and prediction. Since

⁸⁴ Based upon a comparative study of the published results: Chapin, 250 Smith College Seniors and 4,637 University of Minnesota undergraduates; Ells and Brand, 2,924 Junior college students in California; Kirkpatrick, Kolb, *et al.*, 131 farm families from low organization districts; Melvin and Bakkum, 352 farm families; see Chapin, F. Stuart, "Research Studies of Extra Curricular Activities and their significance in reflecting social changes," *Jl. Educa. Sociol.*, IV:493-94 (Apr., 1931); Kirkpatrick, E. L., Kolb, J. H., Inge, C., and Wiledon, A. F., *Rural Organizations and the Farm Family*, Wis. Agri. Exp. Station Bull. 96, 1931; Bakkum, G. A., and Melvin, B. L., *Social Relationships of Slaterville Springs—Brooktondale Area*, Tompkins Co., N. Y., Cornell Univ. Agri. Exp. Station Bull. 50, 1930.

⁸⁵ Based upon a comparative study of the results: Chapin and Mehus, 1,170 University of Minnesota student leaders; Taeuber, 113 upper status Minneapolis citizens; Kirkpatrick, Kolb, *et al.*, 151 families in high organization districts.

⁸⁶ Based upon a comparative study of results: Chapin and Taeuber for urban and Kirkpatrick, Kolb, *et al.*, for rural families.

an extensive discussion of the methodology and limits of prediction in sociology was recently conducted by the American Sociological Society, I shall refer to this publication³⁷ for a consideration of methodological matters and concentrate my analysis on the results of some predictive studies in sociology.

One of the most recent tests of the dependability of sociological prediction was made by Vold³⁸ in answer to the question, Do parole prediction tables work in practice? Vold's original study was based on 1,192 men prisoners in Minnesota prisons for the period 1922-27. He more recently applied the prediction tables based on 542 state prison cases of the period 1922-1927, to a new group of 282 cases paroled from the same institution in 1927 to 1929 and was able to predict violation of parole within the limits of about two per cent error, which shows that, for the first test case at least, his technique has high predictive value, and illustrates a satisfactory application of the criterion, in which statistics has contributed to the solution of a scientific problem of prediction.

During the winters of 1913-14 and 1914-15, the Municipal Lodging House of New York City, and especially the Annex on the Pier at East 23rd Street, served throngs of homeless men and women who sought shelter. Rice describes how, "with the approach of the third winter (1915-16) the question arose as to whether or not the pier would again be required. As cold weather came on, the daily admissions steadily mounted. Late in December, the conjunction of a cold night, the normal Saturday peak, and the normal seasonal growth, sent the number of admissions to a high mark, but still within the capacity of the Municipal Lodging House itself. On the assumption that another period of stress was imminent, steps were immediately taken to fit up once more the annex on the pier. Yet the latter, laboriously and expensively prepared, was not used."³⁹ It subsequently became apparent, that if familiar statistical methods had been used it would have been possible to show that the cyclical movement was distinctly down, thus proving that the seasonal increase was a temporary fluctuation of insufficient proportions upon which to base administrative policy. Although this is a negative

³⁷ See Burgess, E. W., Laws, L. E., Cooley, E. J., Rice, S. A., Burgess, R. W., and Sutherland, E. H., *Social Forces*, VII:533-560 (June, 1929).

³⁸ *Prediction Methods and Parole*, 1931, esp. Ch. VII and Appendix E.

³⁹ *Statistics in Social Studies*, 1930, pp. 8-9.

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example of statistical contribution to sociological prediction, it is worth citation because of its practical importance.

Studies of the total number of relief cases of certain agencies in Minneapolis for the period 1915-1924⁴⁰ and 1920-1932⁴¹ for the Twin Cities, show that the relief indexes of these cities correlate $-.44$ to $-.67$ with the index of bank debits of New York City on a six to seven months lag. As long as this relationship persists, it is probable that we may continue to predict, six months in advance, the fluctuations in the volume of relief cases by observing the fluctuations in the index of bank debits. Specifically, this means that it is possible to predict in May, 1932, from the direction of the bank debits curve, the probable total load of relief cases for November, 1932. Using this technique our predictions of the number of relief cases for the months of March, April, May, and June, 1932, showed an average variation of 8.13 per cent less than the actual number of cases as subsequently reported. An 8 per cent error in prediction is, of course, much larger than the 2 per cent error reported by Vold, but even an 8 per cent error is sufficiently small to suggest the possibilities of scientific prediction in this important field and seems to justify further experimentation directed to the perfection of the technique. Moreover, if we identify relief giving with some degree of dependency, and then regard dependency as a form of behavior occasioned by the breakdown of patterns usually integrated around the standard of living, we have in this field of study also an approach to the large problem of the patterning of human behavior.

In summary of the analyses of this chapter it may be noted: first that certain statistical studies meet the test of differential description in the measurement of social attitudes, social distance and social status, and in the discovery of social patterns; and, second, there is evidence of a beginning of statistical studies which meet the the second criterion of contribution to the solution of the scientific problem of prediction in sociology.

⁴⁰ Chapin, F. Stuart, "Dependency Indexes for Minneapolis," *Social Forces*, V:219 (Dec., 1926).

⁴¹ Chapin, F. Stuart, Cedarstrand, Grace, Jacobson, Ernst, and Stone, Sarah, "Memo on forecasting relief load of total cases for the winter of 1932-33, Twin City Boards of Public Welfare relief cases," May, 1932, mimeographed by the Department of Sociology, University of Minnesota.

BIBLIOGRAPHY

- Bogardus, E. S., "Measuring Social Distance," *Sociol. and Soc. Research*, IX:299-308 (Mar.-Apr., 1925).
- Chapin, F. S., "The Measurement of Sociality and Socio-Economic Status," *ibid.*, XII:208-218 (Jan.-Feb., 1928).
- "Socio-Economic Status: Some Preliminary Results of Measurement," *Amer. Jl. Sociol.*, XXXVII:581-587 (Jan., 1932).
- Cultural Change*, 1928, pp. 201-238, 333-438.
- Douglass, H. Paul, *One Thousand City Churches*, 1926.
- Hexter, M. B., *Social Consequences of Business Cycles*, 1925.
- Rice, S. A., *Quantitative Methods in Politics*, 1928.
- Statistics in Social Studies*, 1930.
- Methods in Social Science. A Case Book*, 1931, esp. analyses 12, 22, 39, 40, 41 and 43.
- Sanderson, R. W., *The Strategy of City Church Planning*, 1932.
- Shaw, C. R., *Delinquency Areas*, 1930.
- Shaw, C. R., and McKay, H. D., *The Causes of Crime*, Vol. II of the report of the National Commission on Law Observance and Enforcement, 1931, pp. 108, 149, 156, 163, 170, 176, 185-88.
- Thomas, D. S., *Social Aspects of the Business Cycle*, 1925.
- Thomas, D. S., *et al.*, "Symposium on the Observability of Social Phenomena with respect to the Statistical Method," *Sociologus*, Dec., 1932 and March, 1933.
- Vold, G. B., *Prediction Methods and Parole*, 1931.
- White, R. C., *Social Statistics*, 1933.

BIBLIOGRAPHICAL APPENDIX

Bibliographies for the Divisions of Sociology Not Given Separate Treatment in the Preceding Chapters.

The Sociology of Art

- Austin, Mary, "American Indian Dance Drama," *Yale Rev.*, XIX:732-745 (June, 1930).
- Bernard, L. L., *An Introduction to Social Psychology*, 1926, Chs. XXIII-XXIV, XXX.
- Calverton, V. F., *The Liberation of American Literature*, 1932.
- Eaton, A. H., *Immigrant Gifts to American Life*, 1932.
- Grosse, E., *The Beginnings of Art*, 1897.
- Harrison, Jane Ellen, *Ancient Art and Ritual*, 1913.
- Hazlitt, H., and Calverton, V. F., "Art and Social Change," *Modern Quart.*, VI:10-27. (Winter, 1931).
- Henke, F. G., *A Study in the Psychology of Ritualism*, 1910.
- Hirn, Y., *The Origins of Art*, 1900.
- , *The Sacred Shrine, A Study of the Poetry and Art of the Catholic Church*, 1912.
- Hough, Walter, "How Did We Come by Art?" *Scientific Mo.*, XXXI: 434-441 (Nov., 1930).
- Kellogg, C. E., "A Social-psychological Version of the Æsthetic Attitude," *Jl. Soc. Psych.*, I:429-434 (Aug., 1930).
- Keppel, F. P., "The Arts in Social Life," *Recent Social Trends*, 1933, II:958-1008, Ch. XIX.
- Keppel, F. P. and Duffus, R. L., *The Arts and American Life*, 1933.
- Odenwald, Mrs. J. Unger, "Fine Arts as a Dynamic Factor in Society," *Amer. Jl. Sociol.*, XII:656-674 (Mar., 1907).
- Ouy, Achille, "Deux Etudes d'Esthétique Sociologique," *Rev. Internat. de Sociol.*, XL:222-235 (Mar., 1932).
- Parrington, V. L., *Main Currents in American Thought*, 3 vols., 1927-30.
- Powdermaker, Hortense, "Mortuary Rites in New Ireland," *Oceania*, II:26-43 (Sept., 1931).
- Privé, J. C., "L'Avenir du Cinéma," *Mercure de France*, CCXXII:257-299 (Sept. 1, 1930).
- Rothacker, Erich, "Der Beitrag der Philosophie und der Einzelwissenschaften zur Kunstsoziologie," *Schr. d. Deutschen Gesellsch. f. Soziol.*, VII:132-155 (1931).
- Snedden, David, "The Waning Powers of Art," *Amer. Jl. Sociol.*, XXII: 801-821 (May, 1917).

The Sociology of Law

- Barnes, H. E., ed., *The History and Prospects of the Social Sciences*, 1925, pp. 444-479.
- Dowdall, H. C., "The Psychological Origins of Law," *Man*, XXXII:4-7 (Jan., 1932).
- Ehrlich, E., *Grundlegung der Soziologie des Rechts*, 1913.
- Frank, Jerome, *Law and the Modern Mind*, 1930.
- Gee, Wilson, ed., *Research in the Social Sciences*, 1929, pp. 181-206.
- Gray, John C., *The Nature and Sources of the Law*, 1927.
- Harper, F. V., "Law in Action and Social Theory," *Internat. Jl. Ethics*, XL:305-329 (Apr., 1930).
- "The Pragmatist Process in Law," *Internat. Jl. Ethics*, XLI:305-328 (Apr., 1931).
- Ogburn, W. F., and Goldenweiser, A. A., *The Social Sciences and Their Interrelations*, 1927, pp. 319-328.
- Parsons, Frank, *Legal Doctrine and Social Progress*, 1911.
- Pound, Roscoe, "The Call for a Realist Jurisprudence," *Harvard Law Rev.*, XLIV:697-711 (Mar., 1931).
- "Juristic Problems of National Progress," *Amer. Jl. Sociol.*, XXII:721-733 (May, 1917).
- "Law and Morals," *Jl. Soc. Forces*, I:350-359, 528-537 (May-Sept., 1923).
- "Legislation As a Social Function," *Amer. Jl. Sociol.*, XVIII:755-768 (May, 1913).
- "The Scope and Purpose of Sociological Jurisprudence," *Harvard Law Rev.*, XXV:140-168, 489-516 (Dec., 1911-Apr., 1912).
- Speck, Peter A., "The Need of a Socialized Jurisprudence," *Amer. Jl. Sociol.*, XXII:503-518 (Jan., 1917).
- Stammler, Rudolph, *The Theory of Justice* (Tr. by Isaac Husic), 1925.
- Storey, Moorfield, *Reform of Legal Procedure*, 1911.
- Szende, Paul, "Zur Soziologie drakonischer Gesetze: Ansätze und Beispiele zu einer Theorie," *Z. f. Soz. Recht.*, IV:76-96 (Apr., 1932).
- Winter, E. K., "Der wahre Staat in der Soziologie des Rechts," *Z. f. Öffentl. Recht.*, XI:161-205 (June 1, 1931).

Political Sociology

- Barnes, H. E., *Sociology and Political Theory*, 1925.
- Bentley, A. F., *The Process of Government: A Study of Social Pressures*, 1908.
- Bernard, L. L., "War and the Democratic State," *Amer. Jl. Sociol.*, XXII:193-202 (Sept., 1916).
- Bryce, James, *The American Commonwealth*, 1888, Chs. XCVIII-CVI.
- Coker, F. W., *Organismic Theories of the State*, 1910.
- Cole, G. D. H., *Social Theory*, 1920.

BIBLIOGRAPHICAL APPENDIX

- Edwards, L. P., *The Natural History of Revolution*, 1927.
 Eldridge, Seba, *The New Citizenship*, 1929.
 Ellwood, C. A., "Psychological Study of Revolutions," *Amer. Jl. Sociol.*, XI:49-59 (July, 1905).
 Frankfurter, Felix, "Democracy and the Expert," *Atlantic Mo.*, CXLVI: 649-660 (Nov., 1930).
 Giddings, F. H., *Democracy and Empire*, 1900.
 Gosnell, H. F., *Why Europe Votes*, 1930.
 Hobhouse, L. T., *Social Evolution and Political Theory*, 1911.
 Kent, Frank, *Political Behavior*, 1928.
 Lasswell, H. D., *Propaganda Technique in the World War*, 1927.
 ———, *Psychopathology and Politics*, 1930.
 LeBon, Gustave, *The Psychology of Revolution*, 1913.
 Lippmann, Walter, *Public Opinion*, 1922.
 Merriam, C. E., "Government and Society," *Recent Social Trends*, 1933, II:1489-1541, Ch. XXIX.
 Michels, Robert, *Political Parties*, 1915.
 Miller, H. A., *Races, Nations and Classes*, 1924.
 Odegard, Peter, *The American Public Mind*, 1930.
 ———, *Pressure Politics*, 1928.
 Oppenheimer, Franz, *The State; Its History and Development Viewed Sociologically* (Tr. by J. M. Gitterman), 1922.
 "The Problems of Democracy," *Pub. Amer. Sociol. Soc.*, Vol. XIV (1920).
 Rice, S. A., *Quantitative Methods in Politics*, 1928.
 Wallas, Graham, *Human Nature in Politics*, 1908.
 "War and Militarism in Their Sociological Aspects," *Pub. Amer. Sociol. Soc.*, Vol. X (1916).
 Ward, L. F., "Sociology of Political Parties," *Amer. Jl. Sociol.*, XIII:439-454 (Jan., 1908).
 Weeks, A. D., *The Psychology of Citizenship*, 1917.
 Woody, Thomas, *New Minds: New Men?* 1932.

Social Ethics

- Addams, Jane, *Democracy and Social Ethics*, 1902.
 Barnes, H. E., "Sociology and Ethics: A Genetic View of the Theory of Conduct," *Jl. Soc. Forces*, III:212-231 (Jan., 1925).
 Bosanquet, B., *Social and International Ideals*, 1917.
 Calhoun, A. W., "The Moral Challenge of Sociology," *Jl. Soc. Forces*, II:680-681 (Sept., 1924).
 Dewey, John, and Tufts, J. H., *Ethics*, 1908.
 Drake, D., *The New Morality*, 1928.
 Duprat, G. L., *Morals: A Treatise on the Psycho-Sociological Bases of Ethics*, 1903.

- Guidetti, I., "Il Conflitto fra la Morale e la Sociologia," *Riv. di Sociol.*, III:29-55 (Jan.-Mar., 1929).
- Hayes, E. C., *Sociology and Ethics*, 1921.
- Hobhouse, L. T., *The Elements of Social Justice*, 1922.
- *Morals in Evolution*, 1915.
- Höfding, H., "On the Relation Between Sociology and Ethics," *Amer. J. Sociol.*, X:672-685 (Mar., 1905).
- Lévy-Bruhl, L., *La Morale et la Science des Moeurs*, 4th ed., 1910.
- Mecklin, J. M., *An Introduction to Social Ethics*, 1920.
- Niebuhr, Reinhold, *Moral Man and Immoral Society*, 1932.
- Ross, E. A., *Sin and Society*, 1907.
- Sidgwick, H., "The Relation of Ethics to Sociology," *Internat. J. Ethics*, X:1-21 (Oct., 1899).
- Small, A. W., *The Significance of Sociology for Ethics*, 1902.
- Spencer, Herbert, *The Principles of Ethics*, 1891-93.
- Tufts, J. H., *The Ethics of Coöperation*, 1918.
- Westermarck, E., *The Origin and Development of the Moral Ideas*, 2 vols., 1906.

The Sociology of Institutions

- Allport, F. H., "'Group' and 'Institution' as Concepts in a Natural Science of Social Phenomena," *Pub. Amer. Sociol. Soc.*, XXII:83-99 (1928).
- *Institutional Behavior*, 1933.
- "The Nature of Social Institutions," *Soc. Forces*, VI:167-179 (Dec., 1927).
- Bernard, L. L., *An Introduction to Social Psychology*, 1926, Ch. XXXVI.
- Chapin, F. S., "A New Definition of Social Institutions," *Soc. Forces*, VI:375-377 (Mar., 1928).
- Cooley, C. H., "Case Study of Small Institutions as a Method of Research," *Pub. Amer. Sociol. Soc.*, XXII:123-132 (1928).
- *Social Organization*, 1909, Part. V.
- Dike, S. W., "The Sociological Treatment of Some American Social Institutions," *Amer. J. Sociol.*, VII:405-415 (Nov., 1901).
- Follett, Mary P., *The New State*, 1918.
- Frazer, J. G., *Psyche's Task, A Discourse Concerning the Influence of Superstitions on the Growth of Institutions*, 2d ed., 1913.
- Hertzler, J. O., *Social Institutions*, 1929.
- Hobhouse, L. T., *Social Development*, 1924, Ch. XI.
- Judd, C. H., "The Nature of Social Institutions," *Soc. Forces*, X:1-4 (Oct., 1931).
- Judd, C. H., *The Psychology of Social Institutions*, 1926.
- Ross, E. A., *Principles of Sociology*, 1920, Chs. XLIX-LIII.
- Spencer, Herbert, *Principles of Sociology*, Parts III-VIII.
- Sumner, W. G., and Keller, A. G., *The Science of Society*, 1927, Vol. I, Part III.

BIBLIOGRAPHICAL APPENDIX

- Tylor, E. B., "On a Method of Investigating the Development of Institutions; Applied to Laws of Marriage and Descent," *Jl. Anth. Inst. Gr. Brit. and Ireland*, XVIII:245-272 (1889).
- Wodon, Louis, "Les Traits Généraux de la Vie Sociale et le Mécanisme des Institutions," *Rev. de l'Inst. de Sociol.*, X:655-681 (Oct.-Dec., 1930).
- Young, Kimball, *Social Psychology*, 1930, Ch. XIII.

Social Organization

- Banister, H., "Sentiment and Social Organization," *Brit. Jl. Psych.*, XXII:242-249 (Jan., 1932).
- Bogardus, E. S., *Fundamentals of Social Psychology*, 1924, Chs. XXI-XXIV.
- Burt, H. J., "Research Methods in Social Organization: A Case-Study in Method," *Pub. Amer. Sociol. Soc.*, XXIII:214-222 (1929).
- Cooley, C. H., *Social Organization*, 1909.
- Gillin, J. L., "Contribution to the Sociology of Sects," *Amer. Jl. Sociol.*, XVI:236-252 (Sept., 1910).
- Hart, J. K., *Community Organization*, 1920.
- Hobhouse, L. T., *Social Development*, 1924, Chs. I-III.
- Lowie, R. H., *Primitive Society*, 1920.
- "Social Organization," *Amer. Jl. Sociol.*, XX:68-97 (July, 1914).
- MacIver, R. M., *Community*, 1917.
- Melvin, B. L., "Research in Group Organization," *Pub. Amer. Sociol. Soc.*, XX:261-269 (1926).
- Morgan, L. H., *League of the Iroquois*, 1904.
- Rivers, W. H. R., *Kinship and Social Organization*, 1914.
- Social Organization*, 1924.
- Ross, E. A., *Principles of Sociology*, 1920, Chs. XXII-XXIX, XLVIII.
- Schurtz, H., *Altersklassen und Männerbünde*, 1902.
- Simmel, Georg, "Number of Members as Determining the Sociological Form of the Group," *Amer. Jl. Sociol.*, VIII:1-46, 158-196 (July-Sept., 1902).
- "Persistence of Social Groups," *Amer. Jl. Sociol.*, III:662-698, 829-836, IV:35-50 (Mar.-July, 1898).
- Swanton, J. R., "The Social Organization of American Indians," *Amer. Anthropol. (N.S.)*, VII:663-673 (Oct.-Dec., 1905).
- Ward, L. F., "Evolution of Social Structure," *Amer. Jl. Sociol.*, X:589-605 (Mar., 1905).
- "Social Classes in the Light of Modern Sociological Theory," *Amer. Jl. Sociol.*, XIII:617-627 (Mar., 1908).
- "Social Differentiation and Social Integration," *Amer. Jl. Sociol.*, VIII:721-745 (May, 1903).
- Webster, Hutton, *Primitive Secret Societies*, 1908.

THE FIELDS AND METHODS OF SOCIOLOGY

Social Control

- Albig, William, "Proverbs and Social Control," *Sociol. and Soc. Research*, XV:527-535 (July-Aug., 1931).
- Bernard, L. L., *An Introduction to Social Psychology*, 1926, Chs. XXXV-XXXVI.
- "Research in Rural Social Control," *Pub. Amer. Sociol. Soc.*, XX: 249-259
- Case, C. M., *Non-Violent Coercion*, 1923.
- "Some Sociological Aspects of Coercion," *Pub. Amer. Sociol. Soc.*, XVII:75-87 (1923).
- Chaffee, Grace E., "Control in an Integrated Social Group," *Soc. Forces*, VIII:91-95 (Sept., 1929).
- Ives, G. A., *History of Penal Methods*, 1914.
- Kern, R. R., "Supervision of the Social Order," *Amer. J. Sociol.*, XXIV: 260-288, 423-453 (Nov., 1918-Jan., 1919).
- Lumley, F. E., *Means of Social Control*, 1925.
- The Propaganda Menace*, 1933.
- McPherson, William, *The Psychology of Persuasion*, 1920.
- Parsons, Elsie Clews, *Fear and Conventionality*, 1914.
- Pound, Roscoe, "Public Opinion and Social Control," *Proc. Natl. Conf. Social Work*, Boston, 1930, 607-623.
- "Social Control," *Pub. Amer. Sociol. Soc.*, Vol. XII (1918).
- Ross, E. A., *Principles of Sociology*, 1920, Chs. XXXIV-XXXV.
- Social Control*, 1901.
- Sorel, G., *Reflections on Violence*, 1912.
- Stein, Ludwig, "The Sociology of Authority," *Pub. Amer. Sociol. Soc.*, XVIII:116-120 (1924).
- Thomas, W. I., "The Relation of Sex to Primitive Social Control," *Amer. J. Sociol.*, III:754-776 (May, 1898).
- Weeks, A. D., *The Control of the Social Mind*, 1923.
- Wells, G. R., *Individuality and Social Restraint*, 1929.

The Sociology of Economic Relations

- Atkins, W. E., and Lasswell, H. D., *Labor Attitudes and Problems*, 1924.
- Beaglehole, Ernest, *Property: A Study in Social Psychology*, 1931.
- Bernard, L. L., "Standards of Living and Planes of Living," *Soc. Forces*, VII:190-202 (Sept., 1928).
- Cooley, C. H., *Social Process*, 1918, Chs. VIII-X, XII, XX-XXI, XXV-XXVIII.
- Sociological Theory and Social Research*, 1930, Chs. IV, VI.
- Duprat, G. L., "Coopératisme et Syndicalisme," *Rev. Internat. de Sociol.*, XXXIX:581-629 (Nov.-Dec., 1931).
- Eliot, T. D., *American Standards and Planes of Living*, 1931.
- Hobhouse, L. T., and Others, *Property: Its Duties and Rights*, 1915.

BIBLIOGRAPHICAL APPENDIX

- Hobson, J. A., *Problems of Poverty*, 3d ed., 1896.
 ——— *The Social Problem: Life and Work*, 1909.
 Work and Wealth, 1914.
 Hughes, E. C., "Personality Types and the Division of Labor," *Amer. J. Sociol.*, XXXIII: 754-768 (Mar., 1928).
 Kropotkin, P., *Mutual Aid*, 1904.
 Loria, Achille, *The Economic Foundations of Society* (Tr. by L. M. Keasbey), 1899.
 Ogburn, W. F., and Others, eds., *Recent Social Trends*, 1933, II:801-911, Chs. XVI-XVII.
 Sombart, Werner, "Nationalökonomie und Soziologie," *Kieler Vorträge* (33), 1930.
 Sumner, W. G., and Keller, A. G., *The Science of Society*, 1927, Vol. I, Part II.
 Tawney, R. H., *The Acquisitive Society*, 1921.
 ——— *Equality*, 1931.
 Thomas, Dorothy S., *Social Aspects of the Business Cycle*, 1925.
 Todd, A. J., *Industry and Society*, 1933.
 Veblen, T. B., *The Engineers and the Price System*, 1921.
 ——— *The Theory of Business Enterprise*, 1904.
 ——— *The Theory of the Leisure Class*, 1899.

Social Pathology

- Bossard, J. H. S., *Problems of Social Well Being*, 1927.
 Colcord, Joanna C., *Broken Homes*, 1919.
 Dexter, R. C., *Social Adjustment*, 1930.
 Elliott, Mabel A. and Merrill, F. E., *Social Disorganization*, 1934.
 Gillin, J. L., *Poverty and Dependency*, 1921.
 ——— *Social Pathology*, 1933.
 Gillin, J. L., Dittmer, C. G., and Colbert, R. J., *Social Problems*, 1932.
 Goddard, H. H., *Feeble-Mindedness*, 1914.
 Goldmark, Josephine, *Fatigue and Efficiency*, 1917.
 Hall, G. Stanley, *Senescence*, 1922.
 Hexter, Maurice B., *Social Consequences of Business Cycles*, 1924.
 Hollander, J. M., *The Abolition of Poverty*, 1914.
 Kelso, R. W., *Poverty*, 1929.
 Mangold, G. B., *Social Pathology*, 1932.
 Morgan, J. J. B., *The Psychology of Abnormal People*, 1928.
 Nearing, Scott, *Social Adjustment*, 1912.
 North, C. C., *Social Problems and Social Planning*, 1932.
 Parmelee, M. F., *Poverty and Social Progress*, 1921.
 Patterson, E. M., ed., "The Insecurity of Industry," *Ann. Amer. Acad. Pol. and Soc. Sci.*, Vol. CLIV, Mar., 1931.
 Phelps, Harold, *Contemporary Social Problems*, 1932.

- Queen, S. A., and Mann, D. M., *Social Pathology*, 1925.
 Young, Kimball, "Social Psychology and Social Reform," *Sci. Mo.*, XXXIV:252-258 (Mar., 1932).

Penology

- Barnes, H. E., *The Repression of Crime*, 1926.
 ———— *The Story of Punishment*, 1930.
 Bates, Sanford, "Have Our Prisons Failed?" *Jl. Crim. Law and Criminology*, XXIII:562-574 (Nov.-Dec., 1932).
 ———— "The Prison of the Future," *Mental Hygiene*, XIV:628-642 (July, 1914).
 Elliott, Mabel A., *Conflicting Penal Theory in Statutory Law*, 1931.
 Flexner, Bernard, and Baldwin, R. N., *Juvenile Courts and Probation*, 1914.
 Gillin, J. L., *Criminology and Penology*, 1926.
 ———— *Taming the Criminal*, 1931.
Handbook of American Prisons and Reformatories, 1925, 1926, 1929.
 Henderson, C. R., ed., *Correction and Prevention*, 4 vols., 1910.
 Hobhouse, S., and Brockway, A. F., eds., *English Prisons Today*, 1922.
 Lewis, B. G., *The Offender and His Relation to Law and Society*, 1917.
 McConnell, R. M., *Criminal Responsibility and Social Constraint*, 1912.
 Mead, G. H., "The Psychology of Punitive Justice," *Amer. Jl. Sociol.*, XXIII:577-602 (Mar., 1918).
 Moreno, J. L., and Whitin, E. Stagg, *Plan and Technique of Developing a Prison into a Socialized Community*, 1932.
 National Commission on Law Observance and Enforcement, "Report on Penal Institutions, Probation, and Parole," Report No. 9, 1931.
 Oppenheimer, F., *The Rationale of Punishment*, 1913.
 Robinson, L. N., *Penology in the United States*, 1921.
 ———— *Should Prisoners Work?* 1931.
 Ruggles-Brise, Sir Evelyn John, *Prison Reform at Home and Abroad*, 1924.
 Sutherland, E. H., and Gehlke, C. E., "Crime and Punishment," *Recent Social Trends*, 1933, II:Ch. XXII.
 Sutherland, E. H., and Sellin, T., eds., "Prisons of Tomorrow," *Ann. Amer. Acad. Pol. and Soc. Sci.*, Vol. CLVII (Sept., 1931).
 Tarde, Gabriel, *Penal Philosophy* (Tr. by Rapelje Howell), 1912.
 Wilson, Margaret, *The Crime of Punishment*, 1931.

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